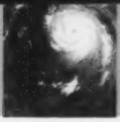
**START YOUR STORAGE ENGINES**
MySQL matches its database with a seemingly unlikely mate: IBM's System i line. **PAGE 8**



**ON THE EDGE OF DISASTER**
Get post-Katrina lessons on disaster recovery from Northrop Grumman's IT team. **PAGE 25**

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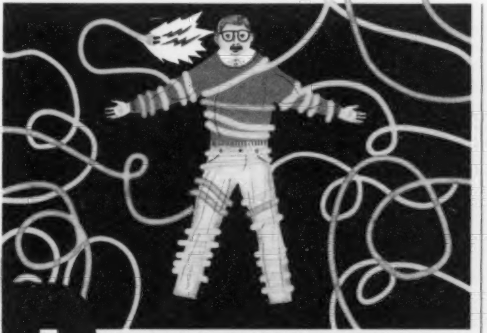

CHRISTOPHER SILAS NEAL

# Power Pinch

VITAL SIGNS

Our **VITAL SIGNS SURVEY** shows that spiking power costs could catch some data center managers off guard. **ROBERT L. MITCHELL** explains why a budget footnote is becoming a C-level concern. **PAGE 20**

# CA Still Enmeshed In Makeover Effort

## CEO Swainson cites progress but says vendor is 'not done'

**BY MATT HAMBLEN**
LAS VEGAS

At CA World 2007 here last week, CA Inc. CEO John Swainson declared that the software vendor has made big strides since its last global user conference 18 months ago. But, he added, the effort to reinvigorate CA's sales and reinvent its culture is still a work in progress.

"We are not the same company we were five years ago, or 18 months ago, or even a year ago," Swainson said during his keynote speech. He added that CA has "come a long way in a short time, but we're not done."

Swainson detailed CA's progress on the six major priorities he outlined at the last CA World conference in November 2005, a year after he was hired to run the then scandal-plagued company. The top priority was improving relationships with CA's users, and Swainson noted that the company got its highest score in seven years on its latest survey asking customers whether they would recommend its products to their colleagues. He didn't specify the score, though.

The other priorities included improving CA's own IT systems and instilling a corporate culture that stresses adherence to a new code of ethics. CA adopted the code after the arrests of former CEO Sanjay Kumar and other former company officials on charges stemming from a fraudulent accounting scheme. Kumar pleaded guilty last year and faces up to 12 years in prison.

Although the fraud scheme still sits like an elephant in CA's living room, 12 users said at last week's conference that they're focused not on the con-

*CA Makeover, page 14*

**MORE ON CA**

**INSIDE:** Justice won't be served if CA doesn't confront co-founder Charles Wang in court, says Don Tennant. **Page 18**

**ONLINE:** Read an in-depth Q&A with CA CEO John Swainson. **computerworld.com**

# Cheating on IT Exams May Cast Doubt on Their Value

## Thieves, 'gunmen' look to profit from stolen technology certification tests

**BY PATRICK THIBODEAU**

The FAQ page of a China-based Web site promises to help its customers get IT certifications "with your least effort." On the right side of the page, a shaded box makes an even more direct pitch: "Order our gunman service and you will pass. Obtain your certications [sic] at home without testing by yourself."

The site and others like it are examples of an IT certification exam piracy market that is operating in plain sight. People looking to cheat on exams can obtain copies of them or simply offshore the work to so-called gunmen, who operate mostly in Asia and will take tests for clients at a cost of up to several thousand dollars.

The activities of exam thieves are creating problems for technology vendors and for the tens of thousands of IT workers and students who legitimately take the tests each year and don't want to see their certifications devalued by cheaters.

Many vendors are already being affected by organized efforts to steal their exams. Late last year, the Association of Test Publishers in Washington surveyed 77 companies, about 60 of which are

*Cheating, page 13*

> [IT vendors] need to learn from their higher education counterparts and clean up their act.
>
> **BRIAN YOUNG**, CIO, CREIGHTON UNIVERSITY, ON THE PIRATING OF IT CERTIFICATION EXAMS

NEWSPAPER

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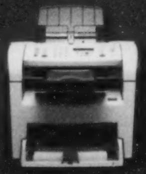

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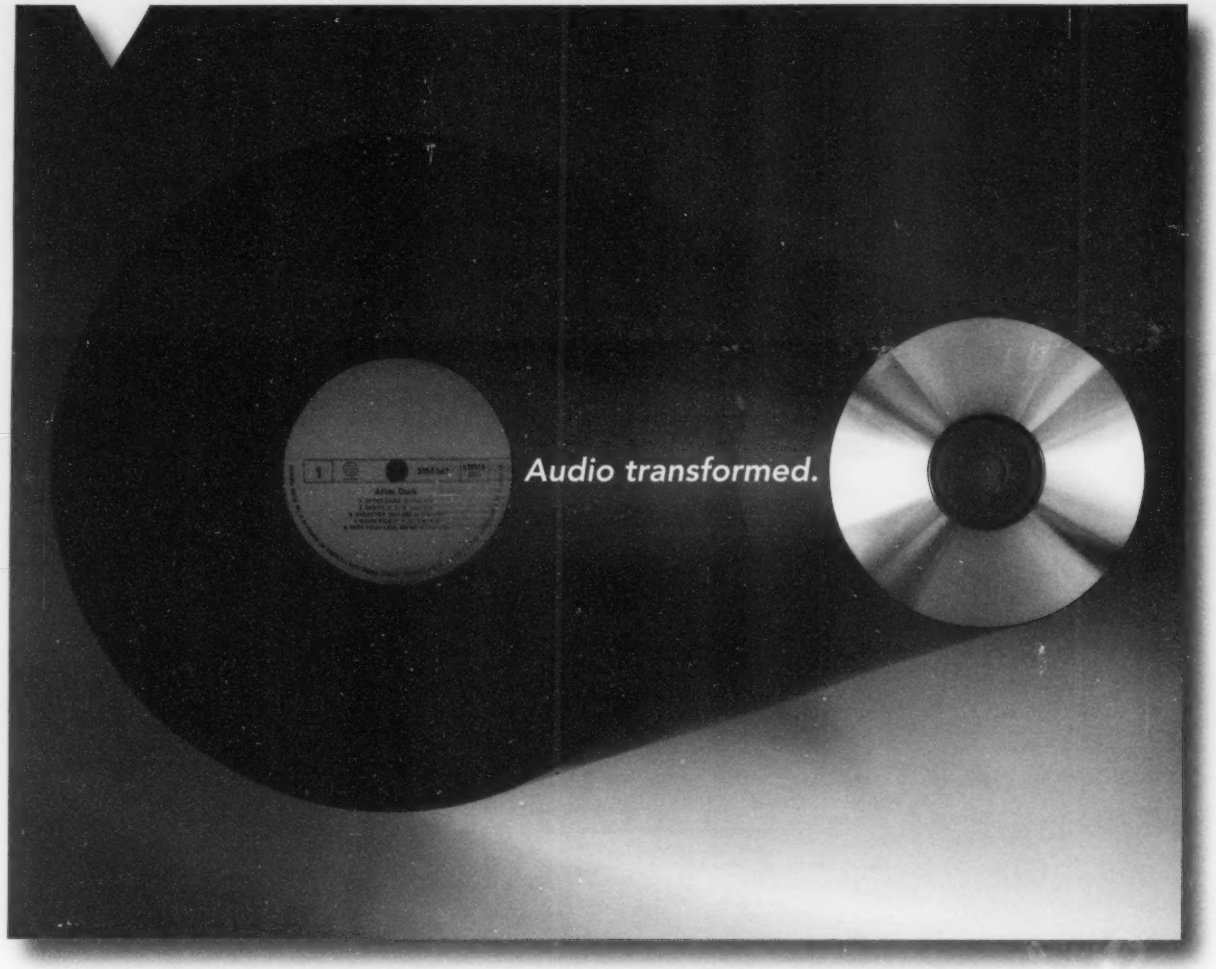

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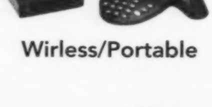

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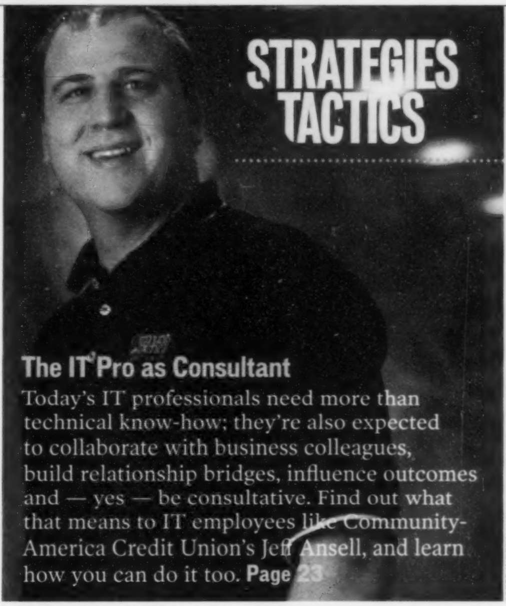

### The IT Pro as Consultant

Today's IT professionals need more than technical know-how; they're also expected to collaborate with business colleagues, build relationship bridges, influence outcomes and — yes — be consultative. Find out what that means to IT employees like Community-America Credit Union's Jeff Ansell, and learn how you can do it too. **Page 23**

SCOTT INDERMAUR

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### Your Votes Tallied: The Biggest Tech Flop of All Time

**HARDWARE:** Our readers have spoken: They gave Microsoft Bob the dubious honor of being the most spectacular tech failure ever. Additional comments ranged from "Where's Y2k?" and "I can't believe you nominated Dreamcast!" to "What constitutes a flop, anyway?" **www.computerworld.com/hardware**

### Introducing TechGear

**MOBILE/WIRELESS:** Mike Elgan gives you the scoop on personal technology stuff you've just gotta have. **www.computerworld.com/mobilewireless**

### How to Dump the Junk That's on a New Windows PC

**HARDWARE:** We provide seven easy steps to a clutter-free PC. **www.computerworld.com/hardware**

### When and Why You Should Roll Out 10 Gigabit Ethernet

**STORAGE:** 10 Gigabit Ethernet hardware will reach "commodity" price levels in about three years, most experts agree. **www.computerworld.com/storage**

### Is ISO 17799 a Wrong Number?

**SECURITY:** Is your company pondering the ISO 17799 security "standard?" Beware — you're looking at a list of guidelines, not requirements. Find out why 20001 is the real five-digit key to a mature security system. **www.computerworld.com/security**

### iPhone Will Test Loyalty Of Cellular Customers

**MOBILE/WIRELESS:** Sprint and Verizon Wireless are trying to act nonchalant about AT&T's forthcoming introduction of Apple's iPhone, but they know the stakes are high. **www.computerworld.com/mobilewireless**

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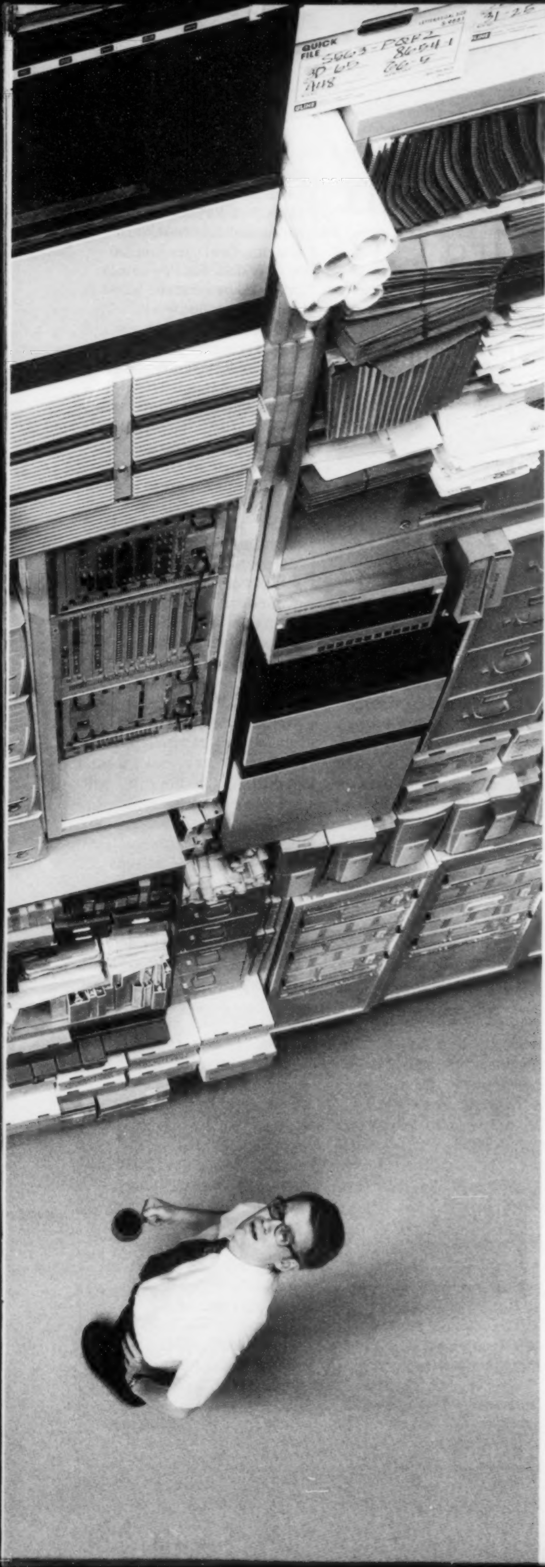

_INFRASTRUCTURE LOG

_DAY 53: We're flooded with information. Data. E-mails. Web content. Video. It's trapped in unconnected systems. It's practically inaccessible. We need to do something.

_Gil needs help finding the right info, but I specifically listed "fear of heights" as a weakness during my last review.

_DAY 54: The answer: IBM solutions for leveraging information. They can help us build a high-performance infrastructure to bring info together, up and down the stack. IBM middleware consolidates critical structured and unstructured info across the silos for a single, unified view. IBM servers and storage give us virtualization for improved utilization.

_Now we can make better decisions with our info. I feel so much more grounded now.

Download the Leveraging Information white paper at:
IBM.COM/**TAKEBACKCONTROL**/INFO

## AT DEADLINE

### EMC Expects $100M From VMware IPO

EMC Corp. has filed with the U.S. Securities and Exchange Commission details of its plans to sell 10% of its VMware Inc. subsidiary. In the filing, EMC said it expects the public offering to raise $100 million. When it announced the plan on Feb. 7, EMC said the funds would be used to provide stock-based compensation for employees and to boost its stock price. VMware's first-quarter sales rose 95% to $256 million.

### Microsoft Credits Vista for Sales Jump

Microsoft Corp. credited deferred revenue from the release of Windows Vista and Office 2007 for a 32% sales increase in its fiscal third quarter, which ended March 31.

MICROSOFT BY THE NUMBERS

| | REVENUE | PROFIT |
|---|---|---|
| Q3 '07 | $14.4B | $5B |
| Q3 '06 | $11B | $3B |

### Websense Agrees To Buy SurfControl

Websense Inc. has agreed to acquire security software rival SurfControl PLC for $400 million in cash. Websense said it expects that the acquisition will result in $60 million in savings. Some of the savings may come from layoffs, but Websense would not say how many of its 750 employees and SurfControl's 600 workers would lose their jobs. The deal is expected to close in four months.

### EMC, Oracle Support Joint Linux Effort

EMC and Oracle Corp. have jointly announced that several core EMC storage offerings now support the Linux implementation of the Oracle 10g database. The companies said that a team of engineers from both firms has certified that EMC's Symmetrix 8000 storage array, high-end DMX 2 and DMX 3 arrays, and several Celerra and Clariion models can be used with the Linux implementation of Oracle 10g Release 2.

# MySQL Works to Broaden Storage Options for Its DB

## Inks deal with IBM as it develops new Falcon data engine

**BY ERIC LAI**
SANTA CLARA, CALIF.

MYSQL AB is continuing its efforts to increase the number of storage engines available to users of its open-source database through an internal project and a deal to make the software available on a seemingly unlikely hardware platform: IBM's venerable System i server line.

That agreement, which was announced at MySQL's annual user conference here last week, will enable System i users to tap into the growing number of applications written for the MySQL software. And the System i version of IBM's DB2 database, which is integrated with the midrange line's operating system as a standard feature, will be certified as a storage engine for MySQL.

Meanwhile, MySQL officials provided more details about the development of a homegrown storage engine code-named Falcon that is expected to be ready for release next year. Senior software architect Jim Starkey said MySQL plans to make Falcon act like an in-memory database as much as possible in order to minimize disk reads and writes.

MySQL's database is built on a modular architecture that lets users tie it to different storage engines. MySQL announced plans to develop Falcon and to make it easier for other vendors to create data stores for the database a year ago, after Oracle Corp. acquired the developers of two MySQL storage engines, including InnoDB, the most widely used one.

### Meeting a Need

Randy Dufault, president of Common, a System i user group, said the addition of support for MySQL "certainly fulfills a need" for companies that run the IBM midrange servers.

The PHP open-source scripting language became available on the System i line over the past year "and just caught fire," said Dufault, who works as a principal engineer at Minneapolis-based systems integrator MBS Technologies Inc. Adding MySQL was the next logical step, he said, because much of the PHP-based software now in use was written to work with that database.

### Database Developments

**MySQL is working on the following upgrades of its namesake software:**

**MYSQL 5.1**

- New features include partitioning and row-based replication.
- In beta now; a commercial release is expected in Q4.

**MYSQL 6.0**

- Will include MySQL's own storage engine, called Falcon.
- In alpha now; a beta release is due in Q4, with shipments expected to follow in 2008.

Since DB2 will still be used to store data, Dufault doesn't expect MySQL to be hard for most System i users to install. The software "is an extension of what we have now — just another option," he noted.

Joanna Power, a software development engineer at Cozi Group Inc., said the Seattle-based developer of an online calendar application runs MySQL on its back-end transaction and data warehouse systems. Cozi uses InnoDB to store data, but Power was intrigued by what she heard about Falcon last week.

"Disks aren't getting any faster," Power said. By its nature, Falcon will be "more complicated" than InnoDB is, she acknowledged. But Power added that she trusts Starkey's development team "to do it right."

Falcon will be the most significant new feature in MySQL 6.0, the next major release of the open-source database, according to MySQL CEO Marten Mickos. He said that Falcon's developers reached a milestone two weeks ago when they finished eliminating top-priority bugs from an alpha version of the storage engine.

IBM will also sell service and support subscriptions for the MySQL Enterprise database via its reseller network and System i sales team. MySQL officials hope that will help the database vendor gain more paying customers. During his keynote speech at last week's conference, Mickos said MySQL has just one paying user for every thousand that don't pay. ◗

*China Martens of the IDG News Service contributed to this story.*

## Digg Dips Deep Into Open Source

SANTA CLARA, CALIF.

**INFORMATION TECHNOLOGY** staffers at Digg Inc. credit two particular features of the company's LAMP-based server cluster for helping its Digg.com news aggregation Web site maintain speedy performance in the face of rapid usage increases.

The site, which lets visitors vote on – or "digg" – their favorite news stories hosted on other sites, recently passed the 1.2 million user mark, according to Elliot White III, an engineer at Digg who spoke at MySQL's user conference here last week.

Digg has about 100 servers that run a combination of Linux, the Apache Web server, the MySQL database and the PHP scripting language – all open-source technologies that are collectively referred to as LAMP. The systems, which are scattered in multiple data centers, include about 20 database servers, 30 Web servers and a few search servers running the open-source Lucene search engine. The rest of the systems operate as backup machines.

In Digg's architecture, a load balancer sends queries to PHP servers, MySQL slave servers that feed data to the PHP servers, and a MySQL master server that feeds data to the slaves. That's a fairly standard setup. But White said that to get away from "sending raw queries against the database," the San Francisco-based company uses open-source memory caching software called Memcached.

First developed for use by LiveJournal Inc.'s online journaling Web site, Memcached stores chunks of data that can be pulled out and used to dynamically create a Web page. Conventional caching technologies, which store entire Web pages, would be too slow and inefficient for a site that changes continuously like Digg.com, White said.

The other atypical feature of Digg's setup is its use of what engineer Tim Ellis called "sharding" – a term apparently coined by developers at Google Inc. Sharding involves breaking a database into smaller parts to improve performance by isolating heavy workloads.

"If 90% of your data is within a certain range and you can get that part working really fast, you can help customers," Ellis said. "Then it's OK if the remaining 10% is slower."

A database can be sharded by table, date or range. The process is similar to partitioning but with some key differences, Ellis said. For example, sharding usually involves divvying up data onto different physical machines, but partitioning is typically done on the same piece of hardware.

Breaking a database into several smaller pieces can mean more work because of the inability to use common SQL commands, such as table joins, Ellis noted. "Developers don't like this crazy stuff," he said.

Digg "is really lucky" in that 98% of the time, users are reading data rather than writing it to the server, Ellis noted. "Most people come to Digg's front page, read it and leave, which is kind of nice," he said, drawing laughs from the audience.

– ERIC LAI

_INFRASTRUCTURE LOG

_DAY 34: This indecision is sinking the business. How do we move to a service oriented architecture? Where do we start? Can we reuse what we have?

_Infrastructure quicksand!! We waited too long. I'd throw Gil my tie, but it's a clip-on.

_DAY 37: A lifeline: IBM WebSphere middleware! It's already helped thousands of customers build an SOA. Adapters give us a standardized approach to integrating apps from SAP, Oracle and others. And it lets us reuse what we have, saving time and money.

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# IT Facing Up to Task of Working With Execs on Disaster Recovery

## However, survey reveals divergent views on level of protection needed

**BY BRIAN FONSECA**

IN HIS role as CIO, Steven Peltzman must ensure that the core systems of business groups in his organization are available when needed. He also recognizes that effective disaster recovery planning may require the prioritization of system availability — and some unpopular IT decisions.

Budget and technology constraints force Peltzman's IT operation at The Museum of Modern Art in New York to "take whatever heat we might get" for data loss and system shutdowns. For some systems, he said, "from what we know about how they work, it's OK if they lose data. They'll survive, and life will go on."

Peltzman said he understands why corporate management puts constraints on disaster recovery spending even though business people are the ones who complain when their systems fail. However, many of his IT brethren are often at odds with business leaders on the importance of business continuity and disaster recovery technology.

Indeed, a recent survey commissioned by SunGard Availability Services found a sharp difference of opinion between IT managers and business executives on that subject. Harris Interactive Inc. polled 176 corporate executives and 351 IT managers in February and March. In results released last week, the Rochester, N.Y.-based firm reported that 71% of the IT respondents said they consider disaster recovery and business continuity to be important or crucial, while just 49% of the business executives said they feel that way.

The survey results show that corporate and IT executives hold widely divergent views on the relative importance of the uptime of front-end applications vs. back-office and network systems, the amount of funding needed to provide uninterrupted data access, and the impact of budget constraints on disaster recovery.

### Realistic Expectations

"I think where IT managers go wrong is they think their job is to make sure every system is perfect," said Peltzman. "That's not reality — there's not an unlimited budget — and that's not the best thing for the organization.

"[IT managers] get into a tug of war, and it hurts their credibility," he added. "I think it's the better IT person that really understands the mission of the company and institution and what's right for it."

Peltzman said he sought to avoid potential clashes when the museum upgraded its IT operation in 2004, by actively seeking input from business leaders on what they needed from his group. Peltzman hired outside consultants to interview personnel in each of the museum's business divisions, and their findings were used to help craft a corporate backup program.

Jim Post, co-founder and director of product development at Biscayne Aquaculture Inc., a builder of aquatic filtration systems in Austin, takes a different view of corporate decisions about IT. The business side, he said, "just isn't aware of the costs" of disaster recovery projects, and that lack of understanding can pose enormous risk to companies.

"It should be frightening to anyone on the business side of the fence that doesn't have 100% assurance from IT that you have nothing to worry about," said Post. "I see the [survey's findings] as sort of the product of the ignorance of business people — ignorance and taking for granted IT and computing infrastructure."

Tom Trainer, an analyst at Evaluator Group Inc., a Greenwood Village, Colo., storage consultancy, said the gap in understanding the importance of disaster recovery and business continuity can be closed through regular communication between IT and business. ▸

**I think where IT managers go wrong is they think their job is to make sure every system is perfect. That's not reality – there's not an unlimited budget – and that's not the best thing for the organization.**

**STEVEN PELTZMAN**, CIO, THE MUSEUM OF MODERN ART

# IT Execs Search Far and Wide for Financial Skills

## Leaders must use a variety of methods to recruit internal and external talent

**BY THOMAS HOFFMAN**
ORLANDO

Over the past few years, many corporate IT organizations have worked hard to better align themselves with the businesses they support by acting more like them.

For example, some have created IT catalogs listing the services available to business divisions, while others have created project management offices to help deliver projects on time and on budget.

But as IT strives to improve its business acumen, managers are finding it difficult to develop or recruit enough people with a strong mix of financial and technical skills.

"We have a position we're trying to fill — a post that manages supplier compliance — and we can't find those skills in-house," said Jeff Cooper, vice president of client services and technical relationship management at The Walt Disney Co.

"It's tougher finding someone who understands the financial side of IT" than it is to recruit someone with highly desirable technical skills, he added.

### In Search of Versatility

Cooper was one of several executives at the IT Financial Management Week conference here last week who bemoaned the dearth of professionals with IT and financial know-how.

The event is run by the International Quality & Productivity Center in New York.

"If I could wave my magic wand [over our IT organization], it would be to solve my financial acumen" skills shortage, said Robert Shanahan, executive IT director at the Nebraska Department of Labor.

Barry Carter, CIO at Alliance Data Systems Inc. in Dallas, said he stresses the importance of learning ITIL service management best practices, customer relationship management and related skills to his IT staff. Carter also helped create a two-day IT financial management course for internal IT staffers.

"One approach that works for us is to show how financial people think," Carter said.

Still, financial skills development sometimes requires creative management thinking.

For instance, Tokyo Electron Ltd. has helped develop 10 IT managers by encouraging them to take business leaders out to eat, said Russ Finney, U.S. CIO. The 10 managers now act as the primary IT contacts for the company's 25 worldwide operating units, Finney said. While providing an entertainment fund for the meals doesn't necessarily foster financial management skills, bringing together IT and business people "has given us better insights into our customers," said Finney.

Under the leadership of CIO Tony Scott, Disney has been training its IT staffers increasingly in disciplines such as ITIL, process delivery and service management, said Cooper.

Eastern Mountain Sports Inc. CIO Jeff Neville is focusing this year on developing staffers with portfolio analysis skills. The Peterborough, N.H.-based outfitter wants an IT staff that "not only looks at technology but can change [business] processes," he said.

Because of its rural location, EMS has had trouble attracting people with the right IT and financial skills, he said.

Internally, Neville said, "I've had success culling people from other parts of the organization outside IT and less success in [grooming] people from areas like the IT maintenance organization into these roles."

Amerisure Mutual Insurance Co.'s Ed Cullari looks for people with a specific mix of skills for the project management office he directs in Farmington Hills, Mich.

"I want someone with a consulting background who can speak to C-level executives," said Cullari. "You have to be part salesman, part project manager and part baby sitter." ▸

# BRIEFS

## Bankers File Suit Against Retailer TJX

**The Massachusetts Bankers Association (MBA) has filed a class-action lawsuit against The TJX Companies Inc. seeking tens of millions of dollars in restitution for banks that were forced to block and reissue thousands of debit cards following a breach of the retailer's computers three months ago. The MBA said that a final estimate of the costs its members incurred as a result of the breach is not yet available because the banks are still receiving lists of cards that were compromised.**

## Oracle Buys Maker Of Utility Software

**Oracle Corp. has agreed to acquire Lodestar Corp., a maker of data management software for the utilities industry, as part of its ongoing effort to build up its vertical industry expertise. The companies didn't disclose terms of the deal, which is expected to close in May. Founded in 1978, Lodestar employs 125 people, most of whom are expected to become part of Oracle's utilities global business unit.**

## Sun Posts Second Profit in a Row

**Sun Microsystems Inc. reported its second consecutive quarterly profit after five quarters of losses.**

SUN BY THE NUMBERS

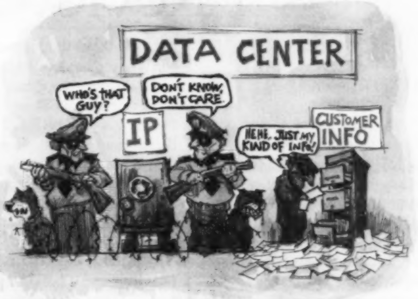
| REVENUE | | PROFIT/(LOSS) |
|---|---|---|
| Q3 '07 | $3.3B | $67M |
| Q3 '06 | $3.2B | ($217M) |

## Microsoft to Open Two Security labs

**Microsoft Corp. plans to open labs in Dublin and Tokyo to study the growing amount of malicious software circulating on the Internet. The two Malware Protection Centers will be staffed with analysts charged with creating updates – called signatures – that can help Microsoft's security products detect malicious software.**

# [ ON THE MARK ]

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL



MATTHEW FAULKNER

## IT Protects IP First; Customer Data . . .

**. . . well, that's not as important.** That's the finding from a survey of 1,500 IT leaders in five countries by London-based Datamonitor PLC for security vendor McAfee Inc. What most surprised Carl Banzhof, McAfee's vice president and chief technology evangelist, was that despite the media hoopla about the cost of not protecting customer information, "the type of data most valued" by IT executives is intellectual property (IP). Even among retail businesses, "IP was more valued than customer data," he reports. Perhaps with good reason. The study shows that the average cost of a single IP loss for a company is $1.68 million. One-third of the respondents said they worried that a major data breach could put their firms out of business. Moreover, 60% of the companies that responded said they had experienced a data breach in the previous 12 months. Most of the security snafus were the result of unintentional mistakes by clueless insiders, although 23% of the internal breaches were malicious actions by disgruntled workers, according to the survey. Banzhof says Santa Clara, Calif.-based McAfee hopes to help matters a bit when it ships its Data Loss Prevention Gateway on May 21. He says the appliance's software can tag or fingerprint sensitive documents, folders, file shares, servers — whatever. It then watches who uses them and how. If a user violates policy — say, by e-mailing a protected file outside the company — the appliance can perform a variety of functions, from blocking the action to merely tattling on the offender. Pricing has not been set.

**37%**
**Percentage of IT execs who say their firms don't adequately support efforts to stop data breaches, according to a Datamonitor/McAfee survey.**

### Share your Web drive . . .

**. . . in a secure group setting.** You have quite a few choices if you want to create a shared data store over the Internet. Michael Ryan, CEO of South River Technologies Inc. in Annapolis, Md., wants you to consider SRT's GroupDrive 5.0 when it ships this summer. GroupDrive, which is often used by businesses with far-flung workers who need to share data, provides support for multifactor authentication, encryption of stored files and stronger scrambling of data while it's in transit, Ryan says. It also includes file locking so that when someone is working on a file, other users can only read it. Pricing starts at $5,500 for 100 users.

RYAN: GroupDrive protects shared data stores.

### Server sprawl sucks up . . .

**. . . data center resources.** The proliferation of commodity x86 servers is a major IT management headache. You know that. Numerous vendors offer "solutions" to the problem. Here's another — one that may be worth your review. Bob Quinn, CEO of 3Leaf Systems Corp. in Santa Clara, Calif., says his company's goal is to "deconstruct x86 servers into a pool of compute, memory and I/O cores." Those cores are then shared by applications that can grab more resources as needed and return excess capacity to the pool as demand decreases. 3Leaf's first product, available in limited quantities in May, is the V-8000 Virtual I/O Server appliance. In effect, the device creates a low-cost storage-area network for up to 40 servers or blades. Quinn contends that today's SANs are too pricey to implement for x86 systems and claims that the V-8000 can cut capital costs for a 100-server deployment by 50% through savings in storage, network and host-adapter gear. A typical redundant V-8000 installation runs about $100,000, Quinn estimates. The real triumph of 3Leaf will come later this year if the company delivers on its promised memory and compute cores. Combined with the I/O core, they could put the brakes on server sprawl in your data center.

**22**
**Average number of servers in a data center rack today, up from seven in 1996, according to IDC.**

### Use the 'wisdom of crowds' . . .

**. . . to win over individuals.** That's the theory behind Baynote Inc.'s Community Guided eCommerce service, which begins today. Jack Jia, CEO of the Cupertino, Calif.-based software-as-a-service operation, says his software "identifies like-minded peers" based on their behavior on a Web site. He says Baynote uses sociological and psychological principles in the software's "behavioral heuristics," which create "fingerprints" of users as they meander through your site's content. While a visitor is roaming around, his behavior will mirror that of some previous visitors, and that lets Baynote predict which content the new visitor is likely to appreciate. Jia insists that Amazon.com's "Customers who bought this item also bought . . ." approach is wrongheaded. "You don't have to purchase the same product to be considered like-minded," he argues. He says you need to factor in what similar folks considered — that is, viewed. Does it work? Well, let's say Baynote is putting its money where its heuristics are. If you don't care to pay the $2,000-per-month subscription fee, you can pay Baynote around 15% of sales that result from its service. ▶

JIA: Baynote helps Web sites compare users to "like-minded peers."

## BRIEFS

### Neiman Marcus Says Worker Data Stolen

The Neiman Marcus Group Inc. has sent letters to nearly 160,000 current and former employees informing them of a potential breach involving their personal data. The company said that "computer equipment" containing the personal information was stolen from a third-party pension plan consultant working for the retailer. The stolen system held employee names, dates of birth, addresses, Social Security numbers, salaries and other information.

### Wireless Business Boosts AT&T Profit

AT&T Inc. said its first-quarter profit doubled because of increased revenue from its wireless operation and the success of its 2006 acquisition of BellSouth Corp.

AT&T BY THE NUMBERS

| | REVENUE | PROFIT |
|---|---|---|
| Q1 '07 | $29B | $2.8B |
| Q1 '06 | $16B | $1.4B |

### Microsoft Security Tool to Ship in May

Forefront Client Security, a Microsoft Corp. antivirus and antispyware tool that has been in development since 2003, will finally make its debut in May, Microsoft CEO Steve Ballmer said last week in a speech in Amsterdam. Ballmer described the software, which is a combination of acquired and homegrown technologies, as an all-in-one security product for business PCs.

### Adobe to Make Flex Tools Open Source

Adobe Systems Inc. has announced plans to make the next version of its Flex software development kit available to the open-source community through Mozilla.org. The Flex tools are used by developers to build multimedia Internet applications. The new version, code-named Moxie, is slated to ship by the end of this year under the Mozilla Public License.

# SAP's SOA, Web 2.0 Plans Get Mixed User Reviews

## Some would prefer that SAP ease ERP software implementation process first

**BY MARC L. SONGINI**
ATLANTA

SAP AG users last week applauded the vendor's road map for adding service-oriented architecture (SOA) and Web 2.0 technologies to its software, though some acknowledged that they aren't yet ready to use the new capabilities.

At the Sapphire 2007 user conference held here last week, SAP executives outlined the company's long-term plan to add SOA and Web 2.0 capabilities to its application software and NetWeaver middleware products.

Executives said the road map also calls for creating new AJAX-enabled interfaces for the NetWeaver tools, which include a portal, data-cleansing products and a data warehouse.

In a keynote address at the conference, SAP CEO Henning Kagermann said that SOA and Web 2.0 technologies like wikis and blogs will be added to SAP applications and middleware so users can more easily collaborate with employees, partners and customers.

The SOA, Web 2.0 and AJAX updates will be available later this year, according to SAP executives.

> **[SAP has] to make the technology more accessible – easier to deploy, manage and configure. You still need to have expensive consultants [to implement the software].**
>
> **DANIEL LUBIN,** DIRECTOR OF IT, ABIOMED INC.

Daniel Lubin, director of IT at Abiomed Inc., a Danvers, Mass.-based maker of cardiac support devices, said the road map is "exciting and interesting, but it will only become relevant" after his company completes a project to replace its homegrown applications with mySAP 2004 ERP software.

At this point, Lubin said he would prefer that SAP concentrate on making its applications easier to implement before adding new capabilities.

"It's got to make the technology more accessible — easier to deploy, manage and configure. You still need to have expensive consultants" to implement the software, he said.

Delvin Fletcher, CIO at SecurIT Ltd., an information security and records management company in Oakville, Ontario, noted that his firm hopes to take advantage of NetWeaver's extended SOA capabilities in the future.

He said that as SecurIT is rolling out SAP ERP software throughout the company, it is also creating processes that will later be able to exploit the SOA technologies in NetWeaver.

### 'Think Big, Start Small'

Olaf Reiss, vice president of research and development at Gisa GmbH, a Halle, Germany-based provider of IT services, noted that while the updated NetWeaver products may be attractive to large companies, the cost of implementing the SOA capabilities could prove prohibitive for small businesses.

Reiss also suggested that SAP application users should move slowly when using NetWeaver to integrate multiple applications. Big-bang implementations of NetWeaver can be dangerous, he said, particularly when some software projects are dependent on the completion of others.

"Think big, start small," Reiss advised.

Jason Lachance, manager of business analytics at LSI Corp., a Milpitas, Calif.-based maker of semiconductor storage systems and software, said he believes that SAP is on the right track with its road map.

LSI runs a mix of SAP ERP and SAP business intelligence software, Lachance said.

He theorized that SAP is boosting the use of SOA at least in part to compensate for its notorious system rigidity. "Anything SAP can do to make its tools more flexible while still maintaining stability will only benefit its customers," said Lachance. ◗

### Sapphire 2007

SAP announced the following at its user conference last week:

- A Java EE 5-based tool kit for developing composite applications
- A new portal client that supports Web 2.0 technologies
- A high-performance enterprise service bus
- An enterprise services repository that lists more than 1,000 services

# SAP Reveals Plan for On-Demand ERP Suite

ATLANTA

**SAP LAST WEEK** shed some light on its plan for a set of integrated on-demand ERP applications for midsize companies that is due to ship next year.

Code-named A1S, the service will be offered as an integrated suite of tools for running various business functions, such as the order-to-cash process, a company spokesman said during the Sapphire 2007 user conference here last week.

The tools for the hosted service have been in development for three years, the spokesman noted.

The service is designed for small and midsize firms that shy away from packaged ERP systems because of cost, complexity and other issues, the spokesman said.

He did not disclose the vendor's pricing plans for the hosted service.

A1S will make it easier for companies to configure and deploy their ERP applications at virtually the touch of a button, said Joshua Greenbaum, an analyst at Enterprise Applications Consulting in Berkeley, Calif. "The configuration is done on the fly, and it's quite leading-edge," he said.

The service will likely appeal to midmarket firms looking to avoid having to manage or maintain back-end applications, Greenbaum said.

At the conference, SAP and Microsoft Corp. jointly announced plans to update Duet, which links SAP's ERP applications with the Microsoft Office business software suite.

Duet first shipped in June 2006. Version 2.0, which will ship by the end of 2008, will include new links to allow sales personnel to access SAP's CRM software through the Office desktop, the companies said.

The new version will also have a link from SAP's business applications to Microsoft's SharePoint Server collaboration software, SAP and Microsoft said.

Meanwhile, SAP announced that the Duet software will be preloaded on Hewlett-Packard Co.'s ProLiant servers beginning in June.

SAP also unveiled SAP E-Sourcing, a hosted application that can be used to automate requests for proposals and online auction processes. The service is priced at $10,000 and is available now, the company said.

SAP said its governance risk and compliance unit in May will ship the GRC Risk Management application to help corporate chief financial officers react to financial risks.

– MARC L. SONGINI

# Farming Co-op Extends Rollout of SOA Tool

## Successful early project generated $1.4 million in revenue in past year

**BY HEATHER HAVENSTEIN**

Southern States Cooperative Inc. is rolling out a new service-oriented architecture (SOA) tool companywide in an effort to boost the efficiency of developers now using several different technologies.

The decision to roll out Skyway Software Inc.'s Visual Workspace tool came after one development team began using it a year ago to build a pricing application that the farming cooperative estimates has since generated $1.4 million in new revenue.

Richmond, Va.-based Southern States, which is owned by more than 300,000 farmers and sells farm supplies in 1,200 retail stores in 23 states, plans to roll out the SOA-based tool to most of its nearly 50 developers over the next 12 to 15 months, said Karen Lankford, vice president of information systems.

The cooperative's software developers now mostly use tools from Oracle Corp., Microsoft Corp. and IBM, she said. The company will retain those tools but hopes that most of the developers will eventually standardize on Visual Workspace for developing Web services, Lankford said.

The graphical interface and modeling tool in Visual Workspace will let the developers more easily build Web services to be used within a company's SOA, Lankford said.

"[The tool] is more than a point of integration and a place to simply store your objects and reference them," Lankford added.

In addition, Visual Workspace will provide Southern States developers with a common tool to build and link Web services, according to Lankford.

The initial application built using Visual Workspace allows product pricing data stored in multiple systems to be changed easily.

Before the application was built, Southern States retail stores' price lists — which were stored in Oracle's OneWorld ERP application, a homegrown point-of-sale application and an online catalog — couldn't be updated quickly or easily, Lankford said.

SOUTHERN STA

Southern States can now more easily update pricing data for its retail stores.

COURTESY OF SOUTHERN STATES

Personnel in the cooperative's stores had to make changes by hand, she said, which caused data reconciliation headaches and made it very difficult to rapidly adjust prices to meet changing market conditions.

Southern States had projected that building the application would take nine months and cost $119,000. But the application was built in five and a half months for $76,000 using the Visual Workspace tool, Lankford said. Also, she noted, the cooperative had expected that the new application would generate $1 million in new revenue annually, $400,000 less than the current estimate.

Before tapping the tools from Tampa-based Skyway for the initial project, Southern States evaluated SOA tools from Microsoft and IBM. Lankford described those products, which lacked functions the cooperative needed to speed the development cycle, as mostly "buckets to keep Web services in."

Lankford did acknowledge that Skyway's ability to reuse code will mark a "dramatic change" for Southern States' developers, which may make them wary of using it at first.

The company must conduct "a campaign to convince people that this is the direction we are going," she said.

Jason Bloomberg, a senior analyst at ZapThink LLP in Baltimore, said that a model-driven approach like that of the Skyway tool is an essential part of a move to an SOA. ▸

## Correction

An item in the April 16 issue's Exec Track column incorrectly reported that Tyler A. Best had recently become CIO at Vanguard Car Rental USA Inc. Best joined Fort Lauderdale, Fla.-based Vanguard in 2003.

*Continued from page 1*

# Cheating

high-tech vendors. About half reported that their exams were available for sale on the Internet. And 75% said they had encountered cheating on exams.

Gene Radwin, who manages development of certification exams at EMC Corp. and was involved in conducting the survey, said the storage and security vendor has found some of its certification exams for sale online. The tests being offered were out of date, Radwin said. But he added that attempts to steal exams haven't been curtailed by any means.

"There is a concerted effort to identify the content of IT certification exams," Radwin said. "It's an ongoing frustration for all of us."

Vendors say they are doing more to boost the security of their testing processes. Measures that some vendors have already taken include continually expanding the pool of test questions they ask and using forensics to identify anomalous results, such as if a user answers easy questions incorrectly but gets difficult ones right.

But the problem is being eyed with dismay by Brian Young, CIO at Creighton University in Omaha. IT vendors "need to learn from their higher education counterparts and clean up their act," he said.

Young said he has heard from his own employees about the availability of IT certification test questions on the Internet. He doesn't discourage workers from seeking certifications or looking for opportunities to get more training, and he may even ask them to share what they have learned with the rest of Creighton's IT staff.

But Young doesn't rely on a certification as proof of expertise in a particular technology. For instance, he said that if he is hiring someone for a networking job, he may ask the candidate to configure some routers or switches as part of the assessment process.

The motives for cheating on exams are easy to understand. IT job ads often list specific certification requirements, and promotions may hinge on certifications as well. No one interviewed by *Computerworld* could say how many people cheat to get certifications, but it is easy to find sources selling "study guides" or "practice tests" that may be based on stolen test questions.

"There is a whole multimillion-dollar industry to promote this kind of behavior. I just found it stunning," said Susan Underhill, Hewlett-Packard Co.'s vice president of global certification and partner education.

Underhill, who has written about the issue on her corporate blog, said HP is putting more effort into improving exam security internally. It is also working with groups such as the Computing Technology Industry Association, or CompTIA, to develop industrywide best practices.

### Proactive Measures

Among the new procedures HP is using is one akin to a "secret shopper," in which company employees take exams to observe what goes on in testing centers, Underhill said. Also, two people sitting next to each other in a testing room may now see different questions on an exam. And HP is increasing its emphasis on performance-based testing, such as requiring the installation of a blade server.

Jill Burroughs, manager of exam development and security at CompTIA, said vendors are becoming more proactive about combating cheating. That includes filing lawsuits and working to persuade online payment processors to stop doing business with Web sites that foster cheating.

John Fremer, president of Caveon Test Security in Salt Lake City, said thieves memorize questions, take screenshots and use text messaging, bribery and other techniques to compile exams.

The international scope of the problem makes it particularly hard to eradicate. But Fremer said installing biometric identification tools at testing centers, especially overseas, could discourage the use of test-taking gunmen. ▸

## Test Question

**From the FAQ page on ITCertHome.com, a certification Web site:**

**Q: What is your service? Is it an online course?**

**A:** No, we do not offer any kind of online training course. We are an authorized exam agent who will help you obtain IT certification with your least effort.

# Insurer Linking E-health Records in Four States

## Aims to reduce duplication, errors and costs while improving quality of care

BY HEATHER HAVENSTEIN

BLUE CROSS and Blue Shield insurance plans in four states are integrating the medical data of more than 11 million clients into a single electronic health records (EHR) system as they look to eliminate unnecessary treatment and encourage preventive care.

Health Care Service Corp. (HCSC), which runs Blue Cross and Blue Shield plans in Illinois, New Mexico, Oklahoma and Texas, has been working for about two years to merge data about patient eligibility, medication, lab visits, hospitalization and physician office visits into a single system.

Chicago-based HCSC plans to provide its clients and doctors with free access to the integrated system, called Blue Care Connection, as it is deployed through the rest of this year, said Joe Taylor, vice president of enterprise business processes at HCSC.

Taylor detailed the effort earlier this month during the World Health Care Congress in Washington.

The move by HCSC is a new twist on the federal government's effort to encourage the adoption of EHRs in hopes of reducing medical errors and bolstering quality of care by replacing disjointed paper records with comprehensive electronic ones.

### Combating Resistance

To date, the effort has focused primarily on encouraging doctors and hospitals to install EHR technology.

Many physicians have so far balked at undertaking such projects because they often involve hefty installation and maintenance costs. Some contend that even though they are the ones who pay EHR expenses, insurance companies end up reaping the lion's share of the rewards in the form of lower costs.

HCSC uses Patient Clinical Summary software from MEDecision Inc. in Wayne, Pa., to gather patient data from various sources to create EHRs. The software also analyzes the data and applies rules to identify options for treating patients, Taylor said.

Doctors can access the data with an Internet connection, he added.

"We're trying to take this data and empower it with some analytics to provide a more meaningful office visit between the member and their selected physician," Taylor said. "There is a chance to do more prevention and more wellness [programs] and to see a potential treatment opportunity and act on it."

He noted that the system could use the MEDecision analytics and rules-based software to remind a patient and a physician that an annual mammogram needs to be scheduled, for example, or to send alerts when different physicians for a single patient write prescriptions for medications that can't be used together.

The system will also provide physicians with a list of all tests done on a patient, eliminating the possibility of conducting unnecessary duplicate tests, Taylor said.

Blue Care Connection went live in New Mexico and Oklahoma last year and in Illinois earlier this year. It will begin operating in Texas by this summer, Taylor said.

"All of this hopefully will help to stem the high rate of [cost] increases in health care," he added.

John Capobianco, president of MEDecision, noted that doctors have been reluctant to invest in EHR tools, which can cost from $35,000 to $100,000 and ultimately just feed data into a system without providing information back to the doctor.

"He is not getting a whole lot of value out of all this big expense," Capobianco said. "The economic benefit just isn't there."

The systems created by health plans, however, offer multiple views of a patient's history based on the claims they pay, he added.

"[The health plans] are a wonderful source of the best set of data that is available today," Capobianco said. "It is certainly a better record than any one individual would have."

Chicago-based HCSC will give doctors free access to EHRs.

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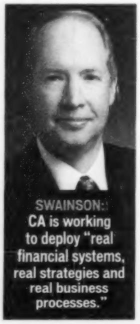
*Continued from page 1*

# CA Makeover

tinuing legal case but on ways to use CA's products to simplify management of complex systems at their companies.

"The securities fraud is important," said an IT manager at a health insurance company in Louisiana. "But even so, it doesn't matter for what I manage." The IT manager, who asked not to be identified, oversees CA's Service Desk tools for his company's help desk staff.

His sentiments were echoed by the other attendees, who said they wanted to learn more about CA's plan to deliver a so-called unified service model (USM) as a core element of its overall management software architecture.



SWAINSON: CA is working to deploy "real financial systems, real strategies and real business processes."

The USM plan was announced at last week's conference. CA officials said the USM will be maintained in the company's configuration management database and give IT managers a full view of the technology, people, processes and other corporate assets that support individual IT services.

The goal, according to CA, is to enable companies to make more informed decisions about allocating IT resources and budgets and managing business risks.

The USM is being tied to 16 packages of tools that CA has created to group its vast portfolio of software products into three broad categories: business service management, IT governance and security management.

"It's a meaningful concept, because CA has all these different products, and they're trying to bring them together," said Matt Crocker, a network administrator at the Tennessee Valley Authority in Chattanooga. Crocker's team has tested and plans to deploy Spectrum, CA's network fault management software, to monitor 200 devices in one of the TVA's divisions.

Crocker added that the integration process has "got to be a challenge for CA, which has so many years of making thousands of products and wants to pull them together in a cohesive way."

Patrik Gertsson, IT manager at Region Skane in Malmo, Sweden, also thinks the USM strategy is a good direction for CA. "IT is a complex world, so if you gather up the many products, it helps," he said. Region Skane, a public agency that provides medical and dental services in the southernmost part of Sweden, has been using CA's Service Desk software for more than a year, Gertsson said.

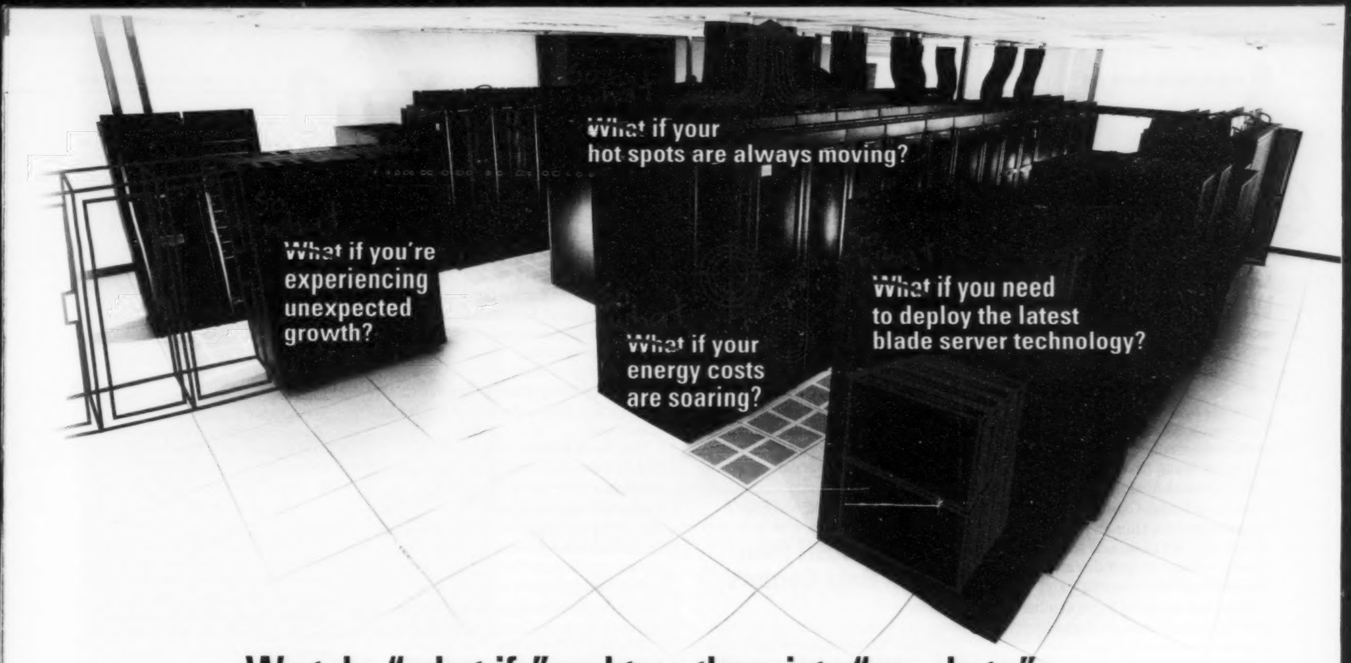
In his keynote address to a crowd of around 6,000 users and CA employees, Swainson said that about 70 large customers have adopted the company's configuration management database since it was introduced last year as part of an effort to "make the management of IT simpler."

Later, during a press conference, Swainson said that CA has "sort of stabilized things inside the company and is now building on the outside" in an effort to return to its past revenue-growth levels. He and Michael Christenson, CA's chief operating officer, noted that 800 members of the company's sales force have been refocused to concentrate on its 4,000 largest customers, which as a group provide about 80% of CA's revenue.

"The thing that has saved this company through all the tough times . . . is that it still had great products and people," Swainson said. "That is our fundamental strength. What we are trying to do now is build on that strength with real financial systems, real strategies and real business processes."

**[USM is] a meaningful concept, because CA has all these different products, and they're trying to bring them together.**

**MATT CROCKER,** NETWORK ADMINISTRATOR, TENNESSEE VALLEY AUTHORITY



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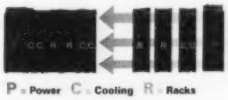

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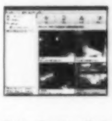

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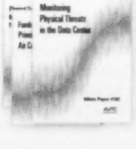

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# GLOBAL DISPATCHES An International IT News Digest

## Chinese Dissident's Wife Sues Yahoo

**BEIJING**

THE WIFE of an imprisoned Chinese dissident has sued Yahoo Inc. for divulging information about her husband's Internet activity. The lawsuit contends that the release of the information led to the arrest and torture of Wang Xiazoning.

The suit was filed in U.S. federal court in Oakland, Calif., by the World Organization for Human Rights USA on behalf of Yu Ling, said Monique Beadle, refugee project director at the Washington-based organization.

Wang was arrested in September 2002 on several charges, including "incitement to subvert state power."

He was convicted in April 2005 after Yahoo turned over e-mail from his account to Chinese authorities. Included was an e-mail to pro-democracy activists in New York regarding Chinese government concerns about an anniversary of the 1989 Tiananmen Square demonstrations.

Yu is seeking damages under the Alien Tort Claims Act and the Torture Victims Protection Act, Beadle said.

Yahoo said it could not comment on the lawsuit. In a statement, the company said that it is "distressed that citizens in China have been imprisoned for expressing their political views on the Internet."

■ JEREMY KIRK, IDG NEWS SERVICE

**GLOBAL FACT**

9%

**Percentage of U.K. companies that have implemented enterprisewide encryption strategies.**

SOURCE: PONEMON INSTITUTE LLC, ELK RAPIDS, MICH.

## Singapore Exchange to Replace Aging System

**SINGAPORE**

SINGAPORE EXCHANGE LTD. last week announced plans to replace its aging Securities Order Processing System with a new trading system from Paris-based GL Trade SA. The announcement came less than a month after a system outage left many traders unable to access the order system for more than an hour.

A month before the March 27 snafu, a heavy trading period had slowed the 17-year-old order-processing system to a crawl for a brief time.

Singapore Exchange said that the latest slowdown did not prevent trades from being completed but that many traders were left without timely access to order information.

The new system will be installed by the end of this year, the exchange said.

"The technology refresh is crucial to raise the performance and reliability of our trading infrastructure," said Hsieh Fu Hua, CEO of Singapore Exchange.

Terms of the deal with GL Trade and technical details of the new system were not disclosed.

■ SUMNER LEMON, IDG NEWS SERVICE

## Barclays, ABN Plan To Join Data Centers

**LONDON**

BARCLAYS PLC will lay off more than 12,000 workers and move 10,800 jobs to India in an effort to generate billions of euros in annual savings following its merger with ABN Amro Holding NV.

The London-based bank last week announced that it has agreed to buy Amsterdam-based ABN Amro for about €67 billion ($91 billion U.S.), creating a European banking giant with more than 47 million customers, including 1.4 million businesses.

The deal is expected to generate annual savings of €3.5 billion ($4.8 billion U.S.) by 2010, the banks said. The two companies said that they also plan to consolidate their data centers and supporting IT networks.

ABN Amro's trade and payments back-office operations will be integrated into the Barclays network, and the credit card operations will be merged into a single organization managed by Barclays' Barclaycard unit, according to the announcement.

The combined company, to be called Barclays, will be based in Amsterdam. The deal is expected to close in the fourth quarter.

■ JAMES NICCOLAI, IDG NEWS SERVICE, AND TASH SHIFRIN, COMPUTERWORLD U.K.

## Group Looks to Monitor E-voting in the U.K.

**LONDON**

A U.K. ADVOCACY group is seeking to monitor local elections next month in which a range of e-voting technologies will be used at selected sites.

The Open Rights Group, which is based here, has requested that local governments and machine vendors provide its members with access to voting facilities during the May 3 elections in England, Scotland and Wales, said Jason Kitcat, e-voting coordinator at the organization.

The group's volunteers want to monitor how e-voting systems protect voter privacy and their vulnerability to fraud, Kitcat said.

The Open Rights Group's findings will be submitted to the Electoral Commission, a body set up by the U.K.'s parliament and charged with evaluating the performance of e-voting systems, he said. The commission is slated to present its results to parliament by Aug. 3.

One voting area in the U.K. that Kitcat declined to identify has already rejected his group's request, he said.

The U.K.'s Department for Constitutional Affairs is overseeing 12 pilot e-voting programs on May 3. The agency has called for the use of new technologies as part of an effort to counter falling voter turnout rates in the U.K.

■ JEREMY KIRK, IDG NEWS SERVICE

## Phishing Scam Targets Australian Tax Office

**SYDNEY**

THE AUSTRALIAN Taxation Office (ATO) has issued a warning against a phishing e-mail that claims to be from the agency.

The e-mail fraudulently uses the ATO logo and the words "Australian Taxation Office — Please Read" in the subject line. The message claims to offer a refund from the ATO and prompts users to click on a link to a fraudulent Web site.

Three variants of the phisher's Web site have been reported so far, one using a URL registered in the Netherlands and the other two using a French URL. The phishing site is not believed to contain malicious software, but it does ask users to provide credit card and personal information.

Greg Farr, second commissioner of the ATO, said the department has notified authorities, who are investigating the matter.

Farr advised recipients of the phishing e-mail to delete it immediately. People who have entered information on the Web site should contact their credit card providers, he said.

■ LIZ TAY, COMPUTERWORLD AUSTRALIA

*Compiled by Mike Bucken.*

## Briefly Noted

**Microsoft Corp. last week asked the European Commission for direction on how much it should charge for protocol information. The commission had ordered Microsoft to disclose protocol information to competitors as part of its antitrust settlement with the company in 2004. The vendor has agreed to distribute the protocols, but the EC said the initial pricing plan does not meet its demand for "reasonable and nondiscriminatory terms."**

■ JEREMY KIRK, IDG NEWS SERVICE

**Australian federal government agencies have collaborated to publish a guide to improve their IT decision-making processes. The *Automated Assistance in Administrative Decision Making Better Practice Guide* was created by 18 agencies to ensure that IT decision-making processes are transparent and accountable and that officials follow best practices, said Gary Nairn, special minister of state.**

■ RODNEY GEDDA, COMPUTERWORLD AUSTRALIA

**Business Objects SA has agreed to buy Cartesis SA, a Paris-based maker of finance and performance management software, for €225 million ($300 million U.S.) in cash. Business Objects expects to combine the Cartesis tools for forecasting corporate costs and spending with its business intelligence software in a suite of products that manage corporate performance.**

■ JAMES NICCOLAI, IDG NEWS SERVICE

**Red Hat Inc. has set up a global services center in Mumbai, India, to help customers deploy open-source technologies. The center will hire about 100 staffers over the next 12 months, Red Hat said. It will also use personnel from Indian outsourcing companies, including Satyam Computer Services Ltd. in Hyderabad.**

■ JOHN RIBEIRO, IDG NEWS SERVICE

**The parliament of New South Wales, Australia, has awarded a multiyear managed security services deal to Earthwave, a Sydney, Australia-based security firm. Under the agreement, Earthwave will manage the core and edge network security at the parliament's Sydney headquarters and at some 94 electoral offices throughout the state.**

■ RODNEY GEDDA, COMPUTERWORLD AUSTRALIA

# Do You Need to Reduce IT Cost and Complexity?

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|---|---|
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| 8:45am to 9:00am | **Introduction and Overview**<br>Ron Milton, Executive Vice President, Computerworld |
| 9:00am to 9:40am | **Market Overview of Grid, SOA and Virtualization**<br>Bob Gill, Managing Director, Servers, The Info Pro |
| 9:40am to 10:20am | **Case Study: Golden Gate University**<br>Anthony Hill, Chief Technology Officer, Golden Gate University and Karl Ehr, Information Technology Operations Manager, Golden Gate University |
| 10:20am to 10:35am | **Refreshment and Networking Break** |
| 10:35am to 11:15am | **Industry Expert Presentation**<br>Phil Brotherton, Senior Director, Network Appliance |
| 11:15am to Noon | **Moderated Panel Discussion**<br>Moderator: Ron Milton, Executive Vice President, Computerworld<br>Panelists: Bob Gill, Managing Director, Servers, The Info Pro; Anthony Hill, Chief Technology Officer, Golden Gate University; Phil Brotherton, Senior Director, Network Appliance; Ashish Mohindroo, Senior Director, Oracle; Ed Franklin, Senior Director, Fujitsu Computer Systems |

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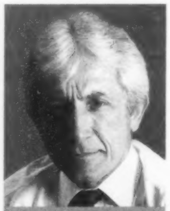
### DON TENNANT

# A Needed Confrontation

IT DIDN'T surprise me a bit. *Computerworld*'s Matt Hamblen and I spent a good deal of time last week speaking with CA's users at CA World in Las Vegas, and we found that almost none of them had Charles Wang top of mind. You can't blame them. They have real problems to solve, they need to understand how CA intends to help solve them, and they just don't have time to dwell in the past. Wang, CA's co-founder and CEO for nearly a quarter century prior to Sanjay Kumar's assumption of the post in 2000, is a fading memory.



**DON TENNANT** is editor in chief of *Computerworld*. Contact him at **don_tennant@computerworld.com**.

It was just a week and a half earlier that CA announced that its board of directors' Special Litigation Committee had concluded that "fraud pervaded the entire CA organization at every level and was embedded in CA's culture, as instilled by Mr. Wang, almost from the company's inception." The committee recommended that CA sue Wang to recover millions of dollars in damages.

The committee's report was submitted to a Delaware court, which can accept or reject the legitimacy of its findings. If it is ultimately accepted, what should CA's next move be? Should it expend the time and resources necessary to undertake what would assuredly be a long, nasty legal battle against Wang?

After speaking about all this in an interview with CA CEO John Swainson last week, I'm convinced that no decision has been made about whether CA will bring a civil case against Wang.

"We have not made any determination about that," Swainson told me, making it clear that that's a decision the board of directors will have to make. "I cannot tell you where the board will come out on this."

So I brought it down to a more personal level. I asked Swainson what, in his view, needs to happen for justice to prevail. He paused thoughtfully before responding. It was clear he was torn.

"I don't know," he finally replied. "On one hand, there's sort of this natural inclination for revenge. On the other hand, the company needs to put this stuff behind it and move on."

It will, no doubt, be a difficult decision. The more natural inclination might well be to just drop it and focus on the future rather than on the past.

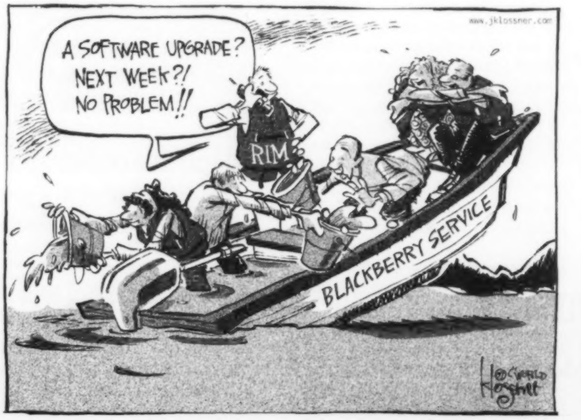
The committee found that Wang had created a "culture of fear" at CA. When I asked Swainson if he still sees any vestiges of that, he responded that he doesn't. "The ghost of Sanjay is in the halls," he said, "but there's not much of Charles left at CA."

Swainson estimates that only about 30% of CA's current employees were there when Wang was. "So there are more new people in the company than old; there are many more people who don't know Charles than do," he said. Even Swainson has met Wang only once, and that was in the mid-'90s when Swainson was at IBM. "I have not met him since then," he said, "which probably says a lot."

It says a lot about Wang's eagerness to detach himself from the company, and about CA's determination to avoid Wang's ominous shadow. The fact remains, however, that the confrontation needs to happen.

Yes, it would mean an expenditure of resources that might otherwise be devoted to addressing users' problems. But CA needs to take civil action against Wang anyway, provided the court accepts the committee's report. The reason has nothing do with revenge. It has everything to do with justice. And that's more important than any user's enterprise IT management problem will ever be. ▸

Don Tennant



### THORNTON A. MAY

# Paying Attention to Paying Attention

ECONOMICS IS the study of how human beings allocate scarce resources. And in this Age of Big Information (discussed in my Feb. 20, 2006, column, "Entering the Age of Big Information"), when we all must be knowledge omnivores able to digest a steady diet of news and information coming at us through media as diverse as smart phones, computers and televisions, there can be little doubt that the scarcest and most precious resource is attention.

**THORNTON A. MAY** is a longtime industry observer, management consultant and commentator. Contact him at **thorntonamay@aol.com.**

Executives, like everyone else, can pay attention to just so much. They have to be careful not only to pay attention to the most important things, but also to know when to completely block out some information. The price of not doing this is to be on partial alert at all times but unable to fully focus when required to. Failure to pay attention to paying attention is one of the surest ways for an IT executive to kill his career.

Crimes against attention have gotten the attention of researchers at the IT Leadership Academy at Florida Community College in Jacksonville. As they seek to chronicle frequent and potentially avoidable lapses in judgment in this area, they have already spoken to dozens of decision-makers at midsize and large companies. But this project has a long way to go. (Please contact me if you are interested in participating.)

The preliminary data demonstrates that the most frequent mistake — though one that's easily rectified — is simply to be ignorant that an active market in attention is at work in the enterprise. It is dangerous and naive to believe that your organization will, as a matter of course, pay attention to the right things.

Many IT executives are convinced that just doing the job is enough. But that leaves them vulnerable to being sidetracked by every stray bit of information that floats their way. Organizations are not whales gorging on every info-plankton within reach.

Linda Stone, a former researcher at Microsoft, coined the phrase "continuous partial attention" — that is, paying partial attention to everything continuously. It's OK in small doses, she says, but "in large doses, it contributes to a stressful lifestyle, to operating in crisis management mode and to a compromised ability to reflect, to make decisions and to think creatively." Stone has also noted that those of us in this industry "think that if tech has a lot of bandwidth, then we do, too." And that's how we sometimes miss the really important things, even though we think we're tuned to catch everything.

Here are some attention strategies we've seen executives use to successfully troll the info-waters:

- They pay attention at the appropriate level of detail.
- They're aware of where regulatory attention needs to be focused.
- They pay granular attention to the things that key current customers are paying attention to.
- They pay attention preemptively to the things that future customers will be paying attention to.
- They tame the devices that have the ability to steal their attention and distract from the things that require their total focus.
- They manage the attention of the organization, keeping it away from areas of dysfunction.
- They pay attention to relationships.

What are you paying attention to? Are you even paying attention to the need to ask that question? ▸

* * *

BRUCE SKAISTIS

# Outsourcing And the Strong CIO

TO ALL THOSE who think outsourcing will lead to the marginalization or elimination of CIOs, I have two words: You're wrong.

**BRUCE SKAISTIS** is the founder of eGlobal CIO Advisors, which focuses on helping organizations maximize enterprise IT value, optimize enterprise IT agility and performance, and minimize enterprise IT expenses.

The truth is that outsourcing makes strong IT leadership even more critical. Outsourcing success can be elusive. Studies have shown that a low percentage of outsourcing relationships are considered successes, and at least 50% of outsourcing relationships are terminated early.

Here are five ways strong leadership can make a difference:

**Blending resources.** In an IT organization that consists of both in-house and outsourced personnel, everyone has to look as if they are on the same team. No one outside of IT should know or care which IT team members are in-house employees and which are outsourced. Creating this seamless blend is not easy, but it can be done with strong leadership.

**Optimizing performance and customer service.** Most outsourcers try to live up to the terms of their agreements, but they do that a lot better when they are held accountable by strong IT leaders. Conversely, some outsourcers will take advantage when strong IT leadership is lacking.

**Making IT more agile.** By its nature, enterprise IT is not very agile — and outsourcing can make it even less so. It takes strong IT leadership to overcome barriers like cumbersome outsourcing agreements and time-consuming processes.

**Quickly addressing and resolving problems.** In outsourcing, small problems can quickly grow into big ones. IT leaders always need to act decisively to solve problems, but that's much tougher with outsourcers than it is with the leader's own employees. IT leaders have to tap into a broad range of skills — communication, diplomacy and negotiation, for example — to effectively address and resolve problems that cross organizational barriers.

**Preparing for insourcing.** Isaac Newton observed that what goes up must come down. Having fought the enterprise IT management wars for more than 30 years, I have observed that what gets outsourced usually gets insourced again — about five years later. While outsourcers are doing a better job than they did in the past, I still think we will see a new wave of insourcing in the not-too-distant future.

But, more important, even if an organization never insources any of its outsourced functions, it will benefit by being prepared to insource. Outsourcers know that insourcing is not a realistic option for an organization that lacks IT leadership that's strong enough to drive an insourcing effort. If you maintain at least the perception that insourcing is an option, you will have extra leverage.

The truth is that any company that thinks the outsourcing of IT is an excuse to marginalize or eliminate the CIO is doomed to an outsourcing failure. ▸

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## READERS' LETTERS

### On Gates and CS Graduates

**DON'T THE** senators and Bill Gates understand that the reason for the drop in the number of computer science graduates is that the job market is disappearing ["Gates in DC as New H-1B Battle Shapes Up," *Computerworld.com*, March 6]? I thought it would be obvious that no jobs equals no graduates.

When all the jobs are being sent overseas or filled by overseas workers at subpar salaries, who wants to invest four years to get a degree that pays less than average for college graduates?

**Gary Pope**
*IT coordinator, Franklin, Ind.*

* * *

### Copy That

**AS A** Ricoh/Savin-certified technician, I found the article "Photocopiers: The Newest ID Theft Threat" [*Computerworld.com*, March 14] very disturbing in its inaccuracy. First, not all copiers include hard drives. Second, the ones that do don't store every scan; they are told by the user what to store. The only time a normal copy is stored is when there are multiple pages, multiple copies or a need for some type of finishing (stapling, hole punching, etc.). Even then, it is stored only through completion of the assigned job.

**Jason R. Walker**
*Field service technician,*
*Advance Business Systems and Supply Co., Baltimore,*
*jwalker81@yahoo.com*

* * *

### The Truly Mindless

**PERSONALLY,** I am apolitical about PCs ["The Real Champions," Editorial, March 19]. I use Windows at work and Mac OS at home, but I haven't really cared about a PC operating system since they took OS/2 away from me. However, Don Tennant shouldn't be so hard on the denizens of "the outrageous otherworld," as he put it. I don't see them as a "corps of Microsoft haters" so much as people who love technology; they use Mac or Linux because it's good stuff, whether or not they feel any emotion about Microsoft. While I can't condone vulgarity or even recklessness, the people I know who are critical of Microsoft are some of the most intelligent people I've ever met. For Tennant to blame Microsoft's dominance on their "mindlessness" is the height of irony. It is the mindlessness of so many willing victims of Microsoft's monopoly that perpetuates it. I applaud CTOs brave enough to exercise their right to choose, and I am grateful to have choices – choices that wouldn't be there if it weren't for their loyal (if sometimes overly exuberant) proponents.

**Cathy Taddei**
*Systems programmer,*
*Portland, Ore.*

* * *

### Not All H-1Bs Go to High-Tech Workers

**I REALIZE THAT** *Computerworld*'s focus is on technology, but I would like to comment that H-1B visas are not used only by high-tech engineers ["House Bill Seeks to More Than Double H-1B Visa Cap," *Computerworld.com*, March 22]. On April 2, I submitted 14 H-1B petitions for 12 employers, of which only two were computer-related. Eight were for special education teachers who specialize in "conductive education," which was developed in Hungary and is now also taught in the U.K. and at Aquinas College in Michigan.

Of those eight, six missed out last year but were able to come here on 18-month H-3 Special Education Exchange Visitor visas so they could teach children with cerebral palsy ways to make their arms and legs work like everyone else's. After that, however, the teachers must leave the U.S. for six months unless we can switch them to the three-year H-1B visa.

So don't just think "high tech" when you think about H-1B visas. Think of the children who will lose out on their ability to mainstream into regular schools.

**Susanna I. Bogue**
*Immigration attorney,*
*San Francisco,*
*sib@justimmigration.com*

**COMPUTERWORLD** welcomes comments from its readers. Letters will be edited for brevity and clarity. They should be addressed to Jamie Eckle, letters editor, Computerworld, PO Box 9171, 1 Speen Street, Framingham, Mass. 01701. Fax: (508) 879-4843. E-mail: letters@computerworld.com. Include an address and phone number for immediate verification.

# STRATEGIES & TACTICS

## Inside 04.30.07

**The IT Pro as Consultant.** IT workers today need to have more than technical know-how; they're also expected to be consultative. **PAGE 23**
**Premier 100 Spotlight** **PAGE 25**
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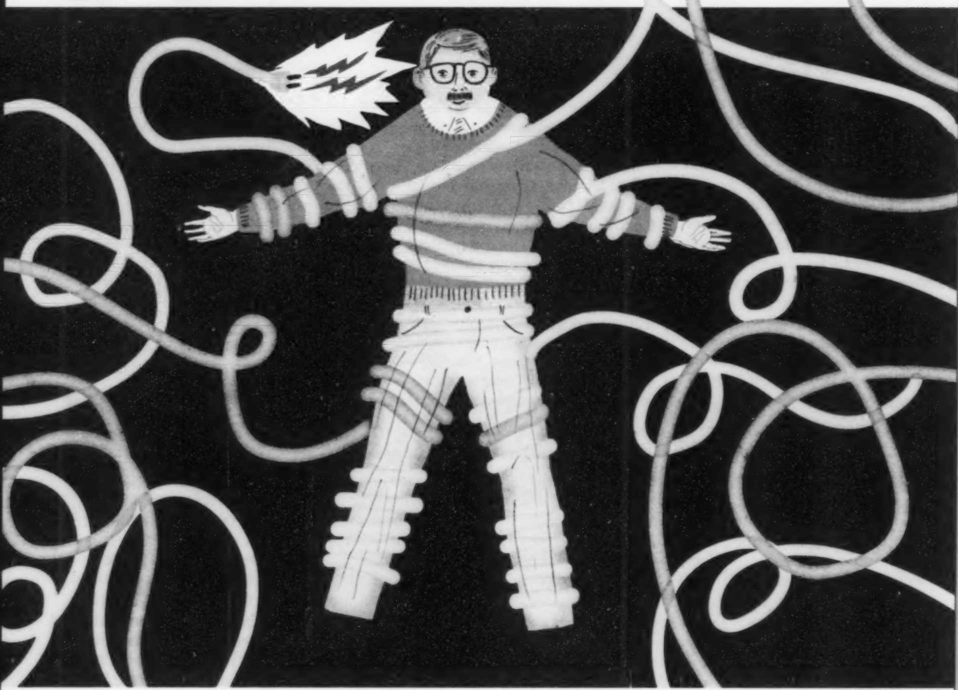

CHRISTOPHER SILAS NEAL

# Power Pinch

### Rising power and cooling costs are catching some data center managers by surprise. Here's why. **BY ROBERT L. MITCHELL**

**VITAL SIGNS**

For John Rowell, chief technology officer at OpSource Inc., keeping a lid on data center power costs is a make-or-break proposition. The Santa Clara, Calif.-based company hosts software-as-a-service offerings. As OpSource expanded its operations to meet customer demand between 2005 and 2006, its electricity costs spun out of control. "We had a 2.75 multiple in power costs over a nine-month period," he says, but OpSource's business model doesn't allow it to pass on those costs. "I had to eat it," Rowell says. Now he's more mindful of energy use.

Data center energy demands, once a line-item footnote, are becoming a bigger concern as power and cooling loads continue to rise, according to *Computerworld*'s latest quarterly Vital Signs survey. Of 194 IT professionals surveyed in February and March, 82% said they consider energy efficiency a factor when selecting IT equipment, and 20% of those at large companies said it's a big consideration.

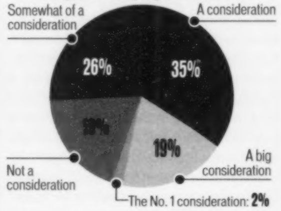
Servers are central to the problem, representing 60% to 80% of power used in data centers, according to John Koomey, staff scientist at Lawrence Berkeley National Laboratory. A study he recently conducted showed that server electricity use in U.S. data centers doubled from 2000 to 2005.

"Data centers in the U.S. are now consuming as much energy per square foot as the industrial sector," says Paul Perez, vice president of storage, network and infrastructure at Hewlett-Packard Co. That trend caught the attention of Congress, which last year

*Continued on page 22*

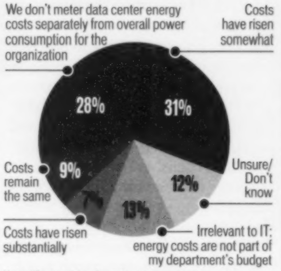
## Power in Numbers

### Is energy efficiency a factor in your IT buying decisions?



Note: Percentages don't add up to 100 because of rounding.

### Are energy costs becoming a bigger part of your overall TCO for IT equipment?



Note: "Costs are less" received no responses.

### What responsibility does IT have for data center power and cooling costs?

| | |
|---|---|
| Power is part of the overall IT budget | 19% |
| Power costs aren't part of my budget, but I justify them | 20% |
| Power costs aren't part of the IT budget and are not an issue for me at this time | 50% |
| IT/data center power is separately metered so power consumption trends can be monitored | 8% |
| Data center power consumption trends are monitored over time | 6% |
| Other | 5% |

Multiple responses allowed.

SOURCE: *COMPUTERWORLD* VITAL SIGNS SURVEY OF 194 IT PROFESSIONALS, FEBRUARY AND MARCH 2007

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*Continued from page 20*

directed the U.S. Environmental Protection Agency to study ways to promote the use of energy-efficient servers in data centers. The EPA's work with Lawrence Berkeley is expected to lead to an Energy Star rating for servers.

Another study, by Christian Belady, distinguished technologist at HP, demonstrates that the per-server lifecycle cost of data center infrastructure already exceeds the per-server acquisition cost. Electricity costs will surpass initial hardware costs next year — and that doesn't include the expense of cooling, which typically doubles the total power requirement. Rising operating costs also lead to higher capital expenses, because infrastructure — from cooling systems to power distribution and power supply systems — must scale to meet demand.

And power density is expected to continue its upward spiral. Industry projections show per-rack power densities hitting 45 kilowatts by 2014 (current designs top out at around 30 kilowatts), and research firm IDC predicts that power costs will grow at four times the rate of spending on new servers through 2010.

OpSource reacted to its power problem by renegotiating its contracts with the service providers that house its servers, basing the agreements on power requirements first and space and cooling second. That's smart because 75% to 80% of infrastructure costs are now related to watts, not area, says Amory Lovins, chairman and chief scientist at the Rocky Mountain Institute Inc., a nonprofit energy-efficiency consulting firm in Snowmass, Colo.

Rowell now factors in energy costs when he buys new equipment. "We deploy servers based on watts per CPU. If we spend 10% more upfront for a potential energy life savings of 30% to 40%, that's very interesting to us," he says.

"On the equipment side, the low-hanging fruit [is] the power supply," says Koomey. The inefficient power supplies used in many volume servers can waste more than one-third of electricity before it reaches the IT equipment. That's because efficiency drops with the IT load. Server utilization rates of around 15% and widespread use of redundant power supplies keep efficiency low.

High-efficiency designs cost 15% to 20% more, but they extend efficiency well beyond 80%, even at low utilization levels, according to Al Rozman, vice president of engineering at ColdWatt Inc., a power supply vendor in Austin. Major server vendors all claim to be shipping or planning to ship high-efficiency power supplies in their volume server lines, and they expect to push efficiency above 90%. Belady says he expects power conversion efficiencies to improve by 30% during the next two to three years.

## Loosen Up

**You can realize substantial savings in data center power consumption if you make basic changes like these:**

- Consolidate servers and turn off dead ones.
- Turn on power management.
- Use variable-speed fans in IT and cooling equipment.
- Optimize air flow.
- Install high-efficiency power supplies.
- Use a hot/cold aisle design.
- Keep air spaces clear of cables and other blockages.
- Seal server cabinets to improve air flow.

It makes good business sense to improve the energy efficiency of data centers, even if doing so means paying more for equipment upfront, says Rowell. "Because we have to run our infrastructure as a profit center, we are very focused on [getting] the most efficiency we can out of the infrastructure we have in place," he says. "Traditional IT cost centers should be doing the same. It's irresponsible not to."

### Identifying the Problem

Unfortunately, many data center operators still don't see the problem coming. Forty-one percent of Vital Signs survey respondents said they still don't know how much energy their data centers use because they don't pay for it.

Philip Borneman, assistant director of IT for the city government of Charlotte, N.C., says he didn't know what his energy costs were until he moved to a new data center. Suddenly, power was metered separately and billed to the IT budget. "That was the rude awakening," he says. Now the city has a strong incentive to keep costs under control.

"Most people are caught off-guard," says Sabet Elias, chief technology officer at financial services firm Lehman Brothers Holdings Inc. in New York. "Due to the lack of transparency [in data center energy costs], most people only become aware of the problem when they're out of power," he says, noting that there are limits on how much electricity the local utility can run to a given facility. As power demands increase, more and more data centers are hitting that wall.

Joe Hedgecock, senior vice president and head of platform and data centers at Lehman Brothers, says power consumption is becoming one of his top concerns. "We're more constrained by power and cooling these days than by space," he says.

The Wall Street firm has 13,000 servers in six data centers worldwide and is migrating many of them onto server blades. That saves space but creates hot spots that require supplemental, targeted cooling systems located directly above the racks. The design pipes liquid refrigerant to a heat exchanger, which blows cold air into the racks. Targeted cooling is more energy-efficient than room air conditioning because the chilled air must travel a much shorter distance to cool the load.

Energy efficiency is a big factor in Lehman Brothers' data center designs. "The data centers we're building have a high focus on power and cooling," says Elias. His strategy includes the use of blades, virtualization, grid computing and multicore processors to reduce power, cooling and space demands.

Those technologies offer a one-time savings as servers are consolidated, but the underlying cause of the problem — compute density that's rising faster than energy efficiency gains — continues unabated. Gartner Inc. analyst Michael Bell predicts that by 2008, half of all data centers will lack the power and cooling resources to meet the demand of higher-density computers.

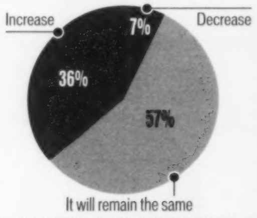
Server manufacturers are beginning to respond with better power management and more efficient hardware designs. "This is the year when you'll start seeing action from the platform vendors," says Brent Kerby, Opteron product manager with the server team at chip maker Advanced Micro Devices Inc.

Energy-efficient data centers offer another benefit. In a coal-fired plant, it takes a pound of coal to generate a kilowatt-hour of electricity, says Lovins. A data center that saves 1 watt eliminates the burning of two tons of coal over the course of 20 years. As concern about global warming brings increased regulation, energy-efficient data centers will be ahead of the game. But those savings also directly affect the bottom line. "If you can design a watt out of your data center now, it's worth upwards of 20 bucks in your pocket today in avoided costs," Lovins says.

While the consequences of inattention to power and cooling issues can be disastrous, the problem is addressable, says Belady. "It's only a crisis if you let it happen to you," he says. "All of these things can be solved." ▪

## Money, People And Projects

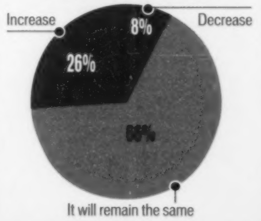
### What changes do you expect in your IT spending in the next three months?



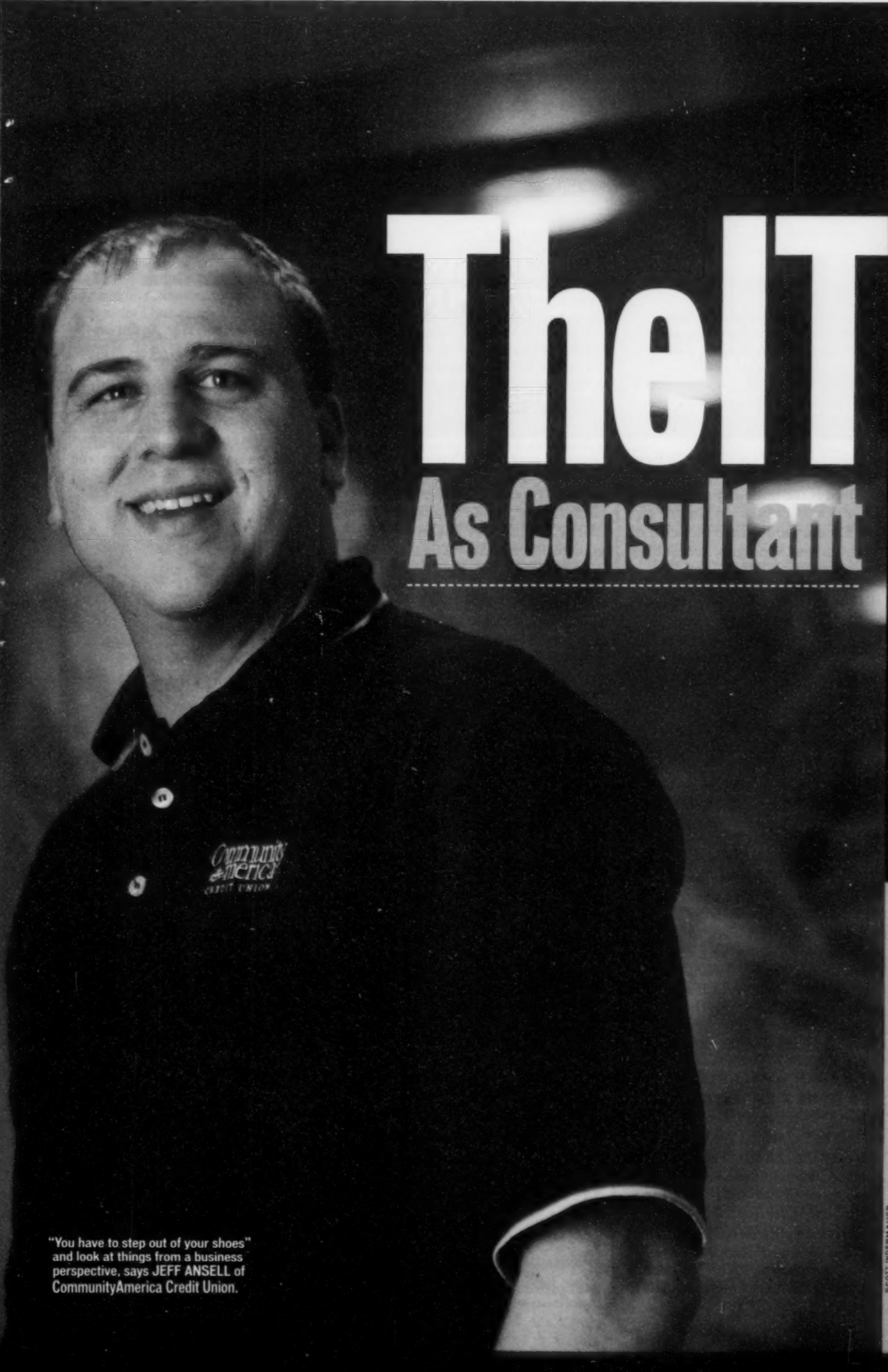
### What do you expect will be your biggest management challenge in the next three months?

| | |
|---|---|
| Managing projects | 22% |
| Budget constraints | 13% |
| Data security/privacy | 13% |
| Managing/developing personnel | 12% |
| Business alignment | 8% |
| Dealing with mergers or acquisitions | 6% |
| IT governance | 5% |
| Regulatory compliance | 4% |
| Outsourcing | 4% |
| Knowledge management | 4% |
| Other | 4% |
| Inventory/asset management | 2% |
| Global initiatives | 2% |
| Project portfolio management | 1% |

### What changes do you expect in your IT head count in the next three months?



SOURCE: COMPUTERWORLD VITAL SIGNS SURVEY OF 194 IT PROFESSIONALS, FEBRUARY AND MARCH 2007



"You have to step out of your shoes" and look at things from a business perspective, says **JEFF ANSELL** of CommunityAmerica Credit Union.

SCOTT INDERMAUER

# The IT As Consultant

## Consulting skills are the key to doing the job right.

**JEFF ANSELL** is trying to think less like an IT guy and more like a business person. "There are times when I'm in a conversation with a client and I have to step back and think, 'If I were that person, would I know what I'm talking about?' Because they don't care about servers; they want to know they can click a button and pull up what they need," he says.

It's a small change, but this junior database administrator says receiving training in consulting skills has helped him empathize with the co-workers he's meant to serve. And it's paying off.

"The conversations are shorter, and things seem to get done quicker," says

Ansell, who works at Community-America Credit Union in Lenexa, Kan.

IT workers today are required to have more than technical know-how; they also need strong interpersonal skills. They must know how to build bridges, collaborate with business colleagues, influence outcomes — in a word, they must act like consultants.

### Understanding Clients

"We need to be more consultative so we can understand our clients' reality," says Laura Gorman, who teaches Consulting Skills for IT Workers, a workshop run by Ouellette & Associates Consulting Inc. in Bedford, N.H. "But in general, people have not developed these skills, so they have to be much more conscious about how they're communicating, how they're listening and how they're building trust."

Gorman defines "consulting skills" as the ability to influence where you don't have direct power. "Whenever you're trying to influence someone, you're trying to give them insight and perspective that they would not be able to understand or see on their own," she explains.

Think of it in everyday terms, Gorman says. You probably know a well-intentioned friend who gives you good advice, but you just won't listen to it. Then there's a second friend who gives the same advice, and you eagerly accept it.

"Why the difference? It's how they're communicating, it's timing, it's that we trust them," she says. In short, that second friend has those key consulting skills.

> **"They already have the technical skills, but what they've got to do is understand their client. And consultants, in general, have the ability to understand their clients and help people reach their goals.**
>
> **MICHAEL LAWSON,** SENIOR ASSOCIATE DEAN, BOSTON UNIVERSITY SCHOOL OF MANAGEMENT

"Just knowing the technology isn't going to get the job done," explains Michael Lawson, senior associate dean at the Boston University School of Management. BU offers a combined MBA and MS degree in information systems; it also offers a training program called the CIO Pocket MBA. Both programs require participants to develop consulting skills as part of their focus on the need to be business savvy. "They already have the technical skills, but what they've got to do is understand their clients. And consultants, in general, have the ability to understand their clients and help people reach their goals," Lawson says.

## Nurturing the Consultative Culture

**If you want to change the culture of your IT shop, you can't rely on a single workshop or training course to do the job. In fact, when the training is over, the real learning begins. Here are some steps you can take to nurture change in your organization:**

Make sure IT managers model the behavior. **The should refer to business people as clients, for instance, and consciously treat them as such.**

Develop an action plan. **Outline how you and your staff will use your skills to accomplish goals such as building trust with others, regaining objectivity in emotional situations and improving meetings that you regularly attend or convene.**

Have regular checkups. **Ask yourself and your team how you're applying your newfound consulting skills in everyday situations.**

Reinforce what you know. **Review course work or workshop materials regularly, especially over the first six months after training.**

**– MARY K. PRATT**

The organizers of the IT Leadership Program at Santa Clara University in California consider consulting skills to be so important that they devote nearly one-third of the three-day seminar to the issue, says Pete DeLisi, the program's academic dean and president of Organizational Synergies, a consulting firm in Fremont, Calif.

"The new work of IT has to do with successfully engaging the business community and delivering value to them," he says. "That's where the consulting skills come in. It's a process of delivering value to the client and community."

The program teaches students how to communicate effectively — that is, to ask the right business questions, probe for the business needs and really listen to clients' answers.

"We're trying to teach what a good consultant is good at: They're good at listening and getting at the underlying business need; they're digging deeper," DeLisi says, noting that IT managers usually don't learn these techniques in college, technical training programs or even as they come up through the IT ranks.

### Real-World Applications

Wayne Brown considers consulting skills to be the ability to define business needs, to communicate those needs to a technical audience, and to then explain to business people how IT can address those needs. "CIOs and IT managers are consulting all the time. It's what we spend most of our time doing," says Brown, CIO at Johnson County Community College (JCCC) in Overland Park, Kan. That's why he believes that "anybody in IT management or anybody who wants to get into it" needs to take part in training like Santa Clara University's IT Leadership Program to develop consulting skills.

Brown took the course in 2000, when he was CIO at Heald College in San Francisco. He sent several of his managers there, too, and he had Santa Clara University develop an on-site program for his JCCC managers shortly after he took the CIO job in 2005.

Brown says managers with consulting skills have stronger relationships with their business-side colleagues, which means they're communicating better and thus able to deliver the right IT products to meet their clients' needs.

Guy J. Russo, CIO at Community-America Credit Union, has found a similar payoff by having his staff attend the Ouellette & Associates workshop.

"I realized IS was not on the most-favored nation list," he says. "A lot of it was due to lack of communication and a lack of understanding."

Ansell credits his own recent success to lessons from the workshop. He says it helped him refocus and develop broad goals, such as listening more carefully to what the business clients were asking of IT, redirecting people to the proper channels rather than handling requests on the fly, and achieving clarity on priorities, timelines and the impact of changes.

## Top Three Skills Sought In IT Job Applicants

| | |
|---|---|
| Communication | 75% |
| Teamwork | 69% |
| Problem-solving | 50% |

Base: 281 IT decision-makers, November 2006
Multiple responses allowed.

SOURCE: FORRESTER RESEARCH INC., CAMBRIDGE, MASS.

"The course really opens your eyes to the fact that there's this whole business out there you're supporting and you can't isolate yourself. You have to step out of your shoes and look at it from their perspective," Ansell says.

The class has to cover a lot of ground over two days to get to that point, from building trust to applying consulting skills in specific circumstances, Gorman says. Instructors use case studies, role-playing and discussions to help IT workers learn to better understand and influence their non-IT colleagues. They talk about audience profiling — thinking about their audiences both within and outside of IT — and how to reach those audiences.

That's one of the biggest messages that Jessica Sullivan, a developer at Great Lakes Educational Loan Services Inc. in Madison, Wis., took away from the Ouellette workshop. "I try to think about what the client is asking for, and I'm more willing to dig deeper," she says. Sullivan says she tries to focus on what colleagues are saying rather than letting her thoughts race ahead like she used to. "I don't think about what I'm going to say while they're talking," she explains.

"It's a different mind-set," says Paul Dachsteiner, vice president of IT at Cole Haan Holdings Inc., a subsidiary of Nike Inc. "It's not just sitting down with someone and saying, 'Tell me what you want.' Now when we sit down with people, we want to hear what they're doing from a business perspective."

Dachsteiner, who has brought the Ouellette course to Cole Haan twice in the past two years, says his workers learned things such as what role to play — silent influencer, technical assistant or tech wizard, for example — depending on the situation and the client's needs.

Such skills enable his IT staffers to work better with their customers, be more responsive and deliver products that better meet their clients' needs, Dachsteiner says, adding, "We're one step better at being value-added partners to our business." ◾

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# On the Edge Of Disaster

PREMIER 100 SPOTLIGHT

## Lessons on **disaster recovery** — and **survival** — from the IT team at Northrop Grumman.

BY ROBERT L. MITCHELL

**THE COMPANY:** Northrop Grumman Information Technology in McLean, Va., is a business unit of Northrop Grumman Corp., a $30 billion defense contractor based in Los Angeles. Northrop Grumman's Ship Systems sector, headquartered in Pascagoula, Miss., provides shipbuilding and fleet support for the U.S. Navy and other customers.

**THE PROJECT:** Rebuilding a data center, networks and end-user equipment at the company's 18,000-employee Ship Systems operation in Pascagoula.

**PROJECT CHAMPIONS:** Tom Shelman, CIO; Ken Lehman, group director, shared services operations; Jim Morales, director of enterprise infrastructure services

As floodwaters rose inside her Ocean Springs, Miss., home on Monday, Aug. 29, 2005, Barbara Harris prepared to evacuate with some essential items: a few photographs, jewelry, a laptop and her BlackBerry, which she placed in a Ziploc bag and carefully tucked into a cooler. She then swam out a window into the aftermath of Hurricane Katrina in search of higher ground.

"I knew I'd need to communicate with someone about what was happening and where we were, so I grabbed the BlackBerry," she says.

Harris, who is IT program manager for Northrop Grumman's IT sector, eventually got her text messages through. Those messages, sharing details of the situation on the ground in southern Mississippi, were among the first to be relayed to CIO Tom Shelman and Ken Lehman, group director of shared services, at the defense contractor's Dallas offices, which became the emergency command center for its recovery efforts. But in the first 24 hours, with power, cellular and land-line telecommunications infrastructures down, Shelman didn't know the status of the Northrop Grumman Ship Systems data center in Pascagoula or the health and safety of the 13,500 employees who worked there. In the hours that followed, what started as an IT recovery effort quickly turned into a personnel recovery effort as well. "From the onset, finding our employees was our No. 1 priority," Shelman says.

By the next morning, having had no communications with Pascagoula, Lehman dispatched Director of Infrastructure Services Jim Morales to the site by private jet to personally assess the situation. "He had a backpack, satellite phones and a couple of walkie-talkies," Lehman says.

A disaster of this magnitude upends the best-laid business recovery plans. But what Premier 100 IT Leaders Lehman and Shelman learned during the days, weeks and months following Hurricane Katrina about safeguarding the lives of employees and preserving the continuity of business operations provides stark lessons in disaster recovery — and survival.

### TIP NO. 1 Plot Out Backup Sites

What Morales found when he arrived in Pascagoula shocked him. The shipyard's data center building had been destroyed, along with 300 servers and related networking and storage-area network equipment. Many other office buildings remained mostly intact, but water 25 feet deep had soaked everything, ruining the phone systems and office IT equipment and leaving the buildings uninhabitable. The backup facility in Avendale, just outside New Orleans, wasn't structurally damaged, but with no power or employees to operate it, it was useless. "You'd figure 100 miles away it would be safe," Lehman says.

That's a common misconception, says Stephanie Balaouras, an analyst at Forrester Research Inc. "Enterprises favor short distances," she says, because distance increases cost and latency. But the backup shouldn't be in the same threat area as the production data center.

### TIP NO. 2 Connect With Suppliers

After the initial assessment, Lehman's team made a snap decision to relocate the Pascagoula data center to Dallas. They immediately called all of the company's vendors and placed priority orders to replace everything, in addition to ordering a 1Gbit/sec. OC12 circuit between the Dallas and Pascagoula sites.

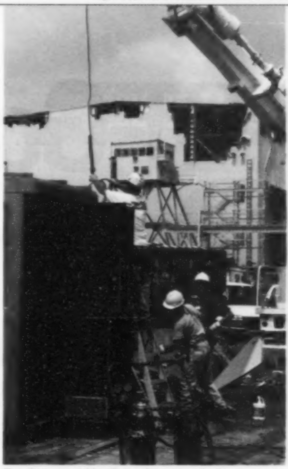
"This was one of our smartest moves. We wanted to get in the order so we'd be first in the queue," Lehman says. Equipment began arriving within 48 hours, and the OC12 circuit, which normally takes 90 days, was in place within two weeks.

### TIP NO. 3 Find Your People

On the ground, Morales found entire neighborhoods razed, leaving only cement slabs and swimming pools. "The shift went from technology to humanitarian relief," he says. After communicating with Morales about the situation on the ground, Lehman reconfigured the IT help desk and supporting systems to function as a 24-hour hot line and nerve center for locating employees and reporting on their safety, housing situation and other pressing needs. A tracking database was also created.

"Repurposing their call center . . . was definitely a creative work-around, given the circumstances," Balaouras says, noting that large companies should consider formal event notification services from vendors such as Dialogic Corp. or MessageOne Inc. Northrop has since developed its own permanent notification system.

Wednesday morning, Anita Logan returned to work to find her building gone and her computer lying 25 feet away from it on the ground. Logan, director of employee relations for the Ship Systems operations, says people were showing up at work with only the clothes on their backs. The IT staff onsite helped distribute clothing, bottled water and food, she says. "The thing that really impressed me was that not only did they restore the technology, they also helped clothe us. They went above and beyond," Logan says.



Employees at Northrop Grumman's Pascagoula, Miss., shipyard move electrical substations for rework following Hurricane Katrina.

### TIP NO. 4 Pick a Point Person

When it came to restoring the IT infrastructure, "the plans we had went out the window," Lehman says. "No one planned for the public infrastructure to be gone, for civil unrest, for not being able to find employees." Also, disaster plans had been made in a vacuum, and managers found that they had a different order of precedence for restoring systems after a real disaster.

"Make sure that there's a person that can rule over what those priorities are," advises Lehman. Morales, the point man, was communicating with other managers on-site, in some cases diverting equipment like generators for more critical tasks, such as to power the medical facility and the water pump house.

By Sept. 12, with critical IT systems fully operational, the shipyard reopened to 6,500 employees. Most of the rest of the workforce was back within four to six weeks.

Lehman says Northrop Grumman has revisited its disaster recovery plans to deal with disasters in which people, not just buildings, are affected. Overall, he's proud of the work the shared services group did. "We were able to demonstrate that the value to the business is more than just hooking up computers," he says. ▪

**ONLINE:** For tales of survival from two of Northrop Grumman's IT team members, visit www.computerworld.com.

# Out-Googling Google

Chinese search giant **Baidu** is beating Google at its own game in China, but it's playing by different rules. **By Sumner Lemon**

**WORLD VIEW**

**SINGAPORE**

"I get it," the Western man says, speaking heavily accented Chinese. Surrounded by beautiful Chinese women in the video advertisement, he grins with self-satisfaction.

Nearby, a suave Chinese man dressed in scholar's robes laughs. "You don't necessarily get it," he says. As the ad unfolds, the Chinese scholar proceeds to humiliate the Westerner, mocking his poor Chinese-language skills. In the end, the women flock to the scholar's side, and the Westerner is left confused, alone and humiliated.

"Baidu understands Chinese better," the Baidu.com Inc. advertisement says, needling the company's former investor and current rival, Google Inc. And statistics seem to bear that out: Baidu accounts for 62% of the country's search traffic, up from 52% in 2005, according to the China Internet Network Information Center in Beijing. For Western companies trying to establish a Web presence in China, understanding how Baidu plays the game could be key.

Founded in 2000 by Robin Li and Eric Xu, two Chinese technology executives who once worked in the U.S., Baidu has grown to become the most visited Chinese-language Web site in the world. In the process, it has also earned the rare distinction of being one of few companies to have competed toe-to-toe with Google and won, though some would say the playing field was tilted.

Baidu's detractors claim that the company abets music piracy and pads the top of its search results with paid listings. But the success and popularity of the company's search engine is undeniable.

A large part of Baidu's early success is attributable to its MP3 search engine, which came just as MP3 players were taking off in China. Lawsuits brought by music companies claiming that the search service infringes on their copyrights haven't slowed Baidu's progress.

The company's rise occurred as the Chinese government was growing increasingly concerned about Google's search engine. That situation came to a head in September 2002, when government censors shut off access to Google in China. A few days later, Chinese officials "hijacked" the Google.com domain name, redirecting Chinese Internet traffic to local search engines that censor results. Most of that traffic ended up at Baidu, giving it an instant boost in popularity and sparking rumors of cooperation with China's police administration, the Public Security Bureau. (Baidu executives declined to comment for this article.)

We don't think competition is a major threat at this point.

**ROBIN LI**, CEO, BAIDU

No reason was ever disclosed for the blocking and subsequent hijacking of Google's domain name, which lasted for a total of 10 days. The event was notable for two reasons, however: It was the first time Chinese censors blocked access to a search engine, and it marked the beginning of the end of Google's reign as China's most popular search engine.

Today, Google lags far behind Baidu in China, in terms of both its popularity with users and revenue derived from search-related advertising. Despite Google's best efforts and the millions of dollars it spent to open an office in China, the company shows no signs of closing the gap with Baidu.

Baidu executives clearly believe that the company's success is secure. "We don't think competition is a major threat at this point," founder Li, who currently serves as the company's chairman and CEO, told investors during a February conference call. (Xu left the company in 2004.)

Like Google, Baidu derives most of its revenue from Internet ads. It earned 829 million renminbi ($106 million U.S.) from online advertising in 2006, a 170% increase over the previous year.

In recent months, Baidu has branched out into new areas, reaching beyond search. The company has added a news service, for which it recently received a license from the Chinese government, and a blogging service, called Baidu Spaces.

### How to Get Your Company Ranked

Despite continuing allegations of click fraud, for companies that want to establish a presence in China, ads are still the main means of driving traffic to their sites from Baidu. But there are ways to optimize your site for the search engine so that your company has a fighting chance to come up high in a Baidu search:

Render all content in simplified Chinese.

Eliminate references to content that might be offensive to the Chinese government.

Eliminate use of keywords that might be sensitive or banned by the Chinese government. (There's no official list, so users have to feel their way here.)

Pay attention to keyword density and metadata, as in other search engines.

– SUMNER LEMON

Buoyed by its success, the company launched a Japanese-language search engine, Baidu.jp, in March, as part of its plan to spend $15 million this year to build up a Japanese business. It will be interesting to see if Baidu "gets" Japan. ▶

*Lemon is an IDG News Service correspondent in Singapore. Contact him at sumner_lemon@idg.com.*

## Baidu Click Fraud Irks Advertisers

**ADVERTISING** on Baidu.com can be a great way to reach Chinese consumers, but advertisers may find that their ads don't necessarily produce the desired results.

Nearly half of companies that advertise on Baidu are discouraged by what they perceive as a high percentage of invalid clicks, including fraudulent clicks, according to a report by Peter Lu, a longtime observer of China's Internet search market and managing director of China IntelliConsulting Corp.

Baidu mixes paid listings and search results, so some users inadvertently click on ads, Lu says. He cites several causes for allegations of click fraud, including inflated click rates by sales agencies and distributors, fraudulent clicks by paid users, fraudulent clicks by competitors, and little overall pressure to stop corrupt practices.

In a recent IntelliConsulting survey, just 25% of Baidu's advertisers said they felt that the invalid click rate was within acceptable limits, and 43% said the problem was big enough to discourage them from advertising. In fact, 46% of the complaining companies said they believed that the invalid click rate was higher than 50%.

About 15% of Baidu's ad customers said they plan to decrease or cease placing ads during the next six months, the report said, but 20% plan to increase their placements during the same period.

The controversy over alleged click fraud on Baidu could spell long-term trouble for the company. Already, some advertisers see Google as a better way to reach a targeted audience.

"Google advertisements have a relatively higher return on investment, but because the traffic with Google is relatively small, the number of users attracted to your Web site is limited," says Lu.

He recommends that companies interested in advertising on a Chinese search engine play the field and compare results from ads placed on Baidu, Google and Yahoo China to find what works best for them.

– SUMNER LEMON

# Filling the Gaps in Application Security

## Our manager never had to know very much about it, but the need for HIPAA compliance means she'd better get on it. By C.J. Kelly

**SECURITY MANAGER'S JOURNAL**

THE WEAKEST link in my security experience is application security. It never mattered a lot, because I always had someone working for me who had the experience I lacked. That all changed when I came to this state agency, though. For the first time, I have no one who can make up for my shortfall in this area.

We outsource our major information systems. However, we are going to start developing some internal applications. That makes me nervous. Our outsourcing vendor is contractually obligated to protect confidential information, something that is vitally important for the agency. When we start doing our own programming, how will I be able to ensure that secure coding methods are being followed? It's time once again to educate myself.

Back when I was in the private sector and working in information security in the financial industry, we approached application security by sitting in on the meetings of the application development team. We might not have understood everything that was said about the actual coding, but we were able to advise the team on things like server and network architecture. For example, if a Web application was being developed, we would make sure that the Web server, application server and database server were located in distinct security zones.

But in the private sector, we always had a lot of people to work on problems, and each person could become specialized. Here, I wear a lot of hats. One of my responsibilities is preparing us for internal audits.

So, what's the auditor's view of application security? According to guidelines published by the Information Systems Audit and Control Association, "The purpose of an application systems review is to identify, document, test and evaluate the controls over an application that are implemented by an organization to achieve relevant control objectives. These control objectives can be categorized in control objectives over the system and the related data."

That's a start. And anyone familiar with Cobit (Control Objectives for Information and Related Technology) knows that the primary criteria for auditing applications are effectiveness, efficiency, confidentiality, integrity, availability, compliance and reliability of information.

The first two on that list, effectiveness and efficiency, aren't big concerns right now. I need to focus on confidentiality, integrity and compliance. We'll be handling confidential health information with our new applications. Compliance with the Health Insurance Portability and Accountability Act is serious business, and there's a lot of potential for inadvertent exposure of protected information if we put these applications on the Web.

> We are going to start developing some internal apps.

### Java Jamming

Here's what I knew at the outset: We are standardizing on Java, a supposedly secure programming language, and we have hired a contractor to write applications for us. I do not always understand what he tells me, but I am trying to come up to speed technically. He is a self-proclaimed expert in Java programming and security. That remains to be seen, but I also have no way to know whether I will be able to assess his skill level, review the applications in development and certify them for production.

But it is not my job to design applications and write code. It is my job to make sure that our networked computing environment is secure. That means sticking my nose into the programmer's world from time to time. My interference is not always appreciated, but that's not my concern. Knowing what I'm talking about is.

Needing to learn more, I stumbled around on the Web for a while until I came across Sun Microsystems' Java Web site, which has tutorials on practically every Java topic you can think of. I was delighted to find a section devoted to Java security.

I am wading through the documentation, and I have learned that security is indeed built into the programming language. An application itself does not need to have security implemented, since you can request security services from Java — the language includes a set of application programming interfaces that provide security services, algorithms, methods and protocols. This allows the programmer to focus on the application itself, since security services can be integrated almost automatically. There's no need to write complex security code.

The Java Security Manager can protect an application from unintended or malevolent programs, control access to resources, generate and check digital signatures and incorporate cryptography. All I want to know is whether someone or something could gain unauthorized access to resources or our data.

That leads us to authentication — determining the identity of a user. Java supports not only the Kerberos protocol and LDAP authentication, but also the establishment of a secure communication channel between the application server and the database server or the end user. I've always been uncomfortable with transmitting our data across the state's network, which I consider to be "untrusted." My first exposure to the workings of Java has raised my comfort level a bit.

I am feeling somewhat more knowledgeable, and there's also something to be said for beginning to understand how much I have yet to learn about secure coding. Fortunately, I have a boss who does understand application development and is a programmer. I'm comfortable with the idea of going to him and saying something like, "We need to make sure that we develop secure applications. I don't know enough about this, but I want to learn. Can you tell me what your approach is to ensuring that our new applications incorporate security?"

Having thus begun a dialogue, I will continue to educate myself and my staff. ▸

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### WHAT DO YOU THINK?

This week's journal is written by a real security manager, "C.J. Kelly," whose name and employer have been disguised for obvious reasons. Contact her at mscjkelly@yahoo.com, or join the discussions in our security blogs: **computerworld.com/blogs/security**.

To find a complete archive of our Security Manager's Journals, go online to **computerworld.com/secjournal**.

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## SECURITY LOG

### Calif. Electric Grid Survives Attack

**An employee failed at an alleged attempt to remotely attack the California electric power grid, because his access had been cut off during a suspension. However, Lonnie Denison was able to use his physical access pass to enter the California Independent System Operator Corp. facility and hit an emergency shutoff switch, officials said. That had no effect on the grid, but Cal-ISO couldn't access the energy trading market.**

### Office Docs Used For Cyberspying

**Maliciously crafted Microsoft Office files are increasingly being used by those engaged in cyberespionage, according to *USA Today*. Corrupted Word, Excel or PowerPoint attachments are being sent to specific targets at federal agencies and defense contractors. Clicking on the attachments relinquishes control of the user's PC without his knowledge.**

### DHS Cybersecurity Plan Lambasted

**According to some experts, legislation that would authorize the U.S. Department of Homeland Security to create cybersecurity emergency preparedness standards for private industry takes the wrong approach. There are concerns that the standards won't be voluntary and will ignore plans that companies have prepared.**

### DOA Data Exposed

**The U.S. Department of Agriculture acknowledged that personally identifiable information on 38,700 people was inadvertently exposed on its Web site for years. The data exposure was discovered and corrected earlier this month.**

## EVENTS

### JavaOne Conference

**May 8-11, San Francisco**

**Sponsor:** Sun Microsystems Inc. The 2007 JavaOne Conference includes tracks on desktop technologies, the next-generation Web, open source, tools and languages, and Java SE, EE and ME. Topics include Java-based robotics, static analysis, high performance in a multicore world, user interfaces, the Swing application framework, Web Beans and mobile AJAX for Java.

**http://java.sun.com/javaone**

### IT Excellence

**May 15-18, Nashville**

**Sponsor:** Forrester Research Inc. Delivering Business Results Through IT Excellence offers 11 tracks, including ones for IT leaders, enterprise architects, application developers, vendor management professionals, and security and risk management specialists. Presentation topics include strategic links and business-focused metrics, taking a process-centric approach, enterprise architecture and enterprise software in 2017.

**www.forrester.com/events**

### Semantic Technology

**May 20-24, San Jose**

**Sponsor:** Semantic Arts Inc. Topics at the 2007 Semantic Technology Conference include the business case for semantics, getting started with the semantic Web, semantic searches and queries, ontology and taxonomy development, business vocabularies, semantic data integration and databases, semantic wikis and collaboration environments, semantic user interfaces, commercial and open-source tools, and programming semantic applications.

**www.semantic-conference.com**

### Asset Management

**June 3-6 Nashville**

**Sponsor:** Gartner Inc. Tracks at the IT & Software Asset Management Summit 2007 include hardware and software procurement and asset management fundamentals. Topics include leasing and financing, reviewing software license agreements, strategic vendor management, open source in the enterprise, software audits, software as a service, and effective sourcing.

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ROBERT L. MITCHELL

# Memory: The New Power Hog

FOR ENGINEERS developing the next generation of servers, the CPU is no longer the biggest design obstacle to controlling power and cooling costs, which is a major issue for many data centers. "It used to be that the processor was our main concern," says Roger Schmidt, chief thermal architect and distinguished engineer in IBM's server and workstations division.

Not anymore.

**ROBERT L. MITCHELL** is a *Computerworld* national correspondent. Contact him at **robert_mitchell@computerworld.com**.

System designers have been given a reprieve from contending with spiking CPU power demands in the volume server market as both AMD and Intel have continued to move to more energy-efficient multicore designs. For now, both chip makers are pledging to hold the line on power consumption while continuing to offer improved performance in smaller packages.

The other big kahuna — power supply conversion losses — is gradually coming under control. The power supplies found in most commodity Wintel servers today can waste 35% or more of incoming power before it ever reaches the processor. But Sun, HP and IBM have all developed power supplies that exceed 80% efficiency, even at low load levels. Some servers are now shipping with power supplies that exceed 90% efficiency.

The challenge now, Schmidt says, is not processors. Or power supplies. Or storage. It's memory. Users simply want too much of it.

Applications are demanding more RAM than ever. And ironically, the very technologies IT has used to consolidate server sprawl and reduce power and cooling loads — virtualization, multicore chips and blade servers — have also increased the demand for memory. "The more processing power you put on a chip, the more you need to surround it with memory," says Rich Hetherington, chief architect and distinguished engineer at Sun.

While memory density continues to follow Moore's Law, the demand for memory is moving faster than the rate at which memory-chip density is increasing. That leaves system designers struggling to fit more and more dual in-line memory modules (DIMM) on smaller and smaller motherboards.

IBM's high-end Intel-based System x3950 four-way servers are now being configured with as many as 64 DIMMs. And the need to free up more real estate for DIMMs led Sun to go with fatter server blades in its 8000 Series line, bucking the "smaller is better" trend.

Increasingly, IBM is shipping machines whose power requirements for memory far outstrip those for processors. "The ratio we're seeing now is the memory taking over 2 to 1. That's huge," Schmidt says. Depending on the system architecture, the power load for just one DIMM can be as high as 14 watts, according to AMD. In contrast, the chip maker's dual-core processor for the blade server market consumes 68 watts.

Once system designers get the memory on the board, they still have to cool it. "A major problem for us in the design of our boxes is how to handle all of this memory that customers are asking for. It's a lot of heat in a small space," Schmidt says.

Both server and component manufacturers are finding creative ways to cut the power. AMD's Opteron architecture couples an on-chip memory controller with low-power register DDR2 memory that consumes just 2 watts at idle and 4.6 watts at peak.

Using higher-density memory can help, since the higher-density DIMMs consume about as much power as lower-density ones, according to AMD. But the cost per gigabyte is higher, and the number of DIMMs required still adds up. "Memory is not cheap anymore. It's a big piece of the pie," Schmidt says.

Sun uses fully buffered DIMMs, which are faster and higher capacity than regular DIMMs but add what Hetherington calls a "power tax." To minimize the power draw, Sun shuts down unused memory. "If a bank of memory is idle, we'll turn off the clocks," he says. That works for applications that can tolerate some latency, since the processor must issue a command to turn the memory back on before issuing a read command. "But for our x64 line, where latency is a huge issue, that would be painful," says Hetherington.

Where will it all end? Power-saving innovations may slow down the rate at which data centers move to higher energy densities, but the forces propelling users to jam ever-higher numbers of smaller, faster servers into a single rack are unlikely to subside. The increasing demand for memory will simply make server blades bigger than they otherwise might have been — and more power-hungry. ▸

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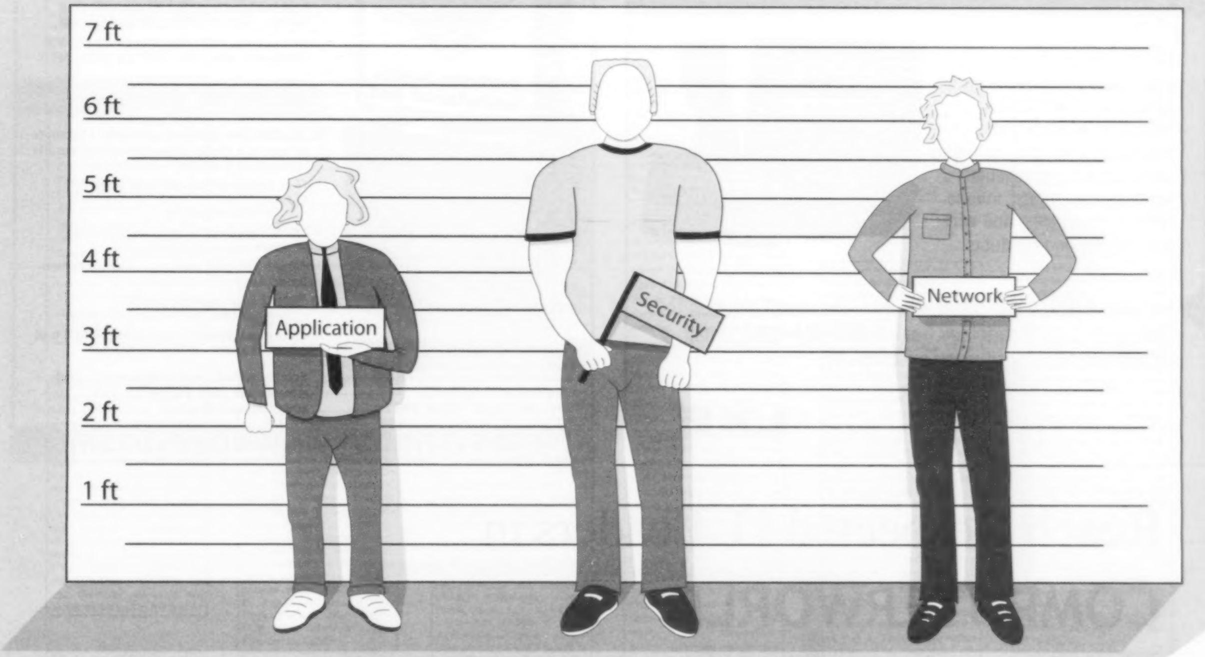

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# HP: Nothing New

HEWLETT-PACKARD has made a startling discovery. Last week, an HP marketing executive announced that "IT as we know it is really over" and that, going forward, HP won't be in the information technology business. No, from now on, HP will be in the business of "business technology."

Or, as one industry analyst explained it, HP intends to shift from selling IT products to solving business problems.

Wow. Imagine that. Who'd have thought a major IT vendor would finally discover what its customers have been doing for decades?

Let's go over this slowly. And so HP's marketeers won't get confused, we'll keep it simple.

IT is about solving business problems. It always has been.

IT isn't about PCs or servers. It's not about networks or operating systems or packaged applications. It never has been, any more than a CEO's job is about pens and reports and thick carpets and dark oak furniture.

Those are merely the tools of the job. The purpose is to make the business run better. Without that, the rest is just so much junk.

Smart CIOs have always known that. Clever IT managers figure it out early in their careers. There will always be a few IT-shop newbies and obsessive tech-heads who don't get it, but most everyone else knows that software and hardware, bits and wires, are just a means to an end. We understand that IT is all about the business.

And we hope, friend marketeer, that you'll excuse us if we're not *quite* ready to believe that you understand that too.

See, for as long as we can remember, you've insisted that your PC, your server, your operating system, your network, your software would solve our IT problems. No surprise there, really: Products were what you had to sell. It was in your interest to believe they were what we needed.

Some of them were good products. They were useful pieces of technology, and we were happy to buy them from you. The rest? Not so much.

But none of your products were solutions to our business problems. Why would they be? You didn't know how our businesses run, or what our business problems are. That takes people on the inside — IT people who rub up against the users with the business problems every day, who've seen what works here and what doesn't and why, whose paychecks come directly from the cash we're charged to help keep flowing.

Shoveling products through the door is easy. Solving business problems is hard.

We know. We've spent our careers doing exactly that — negotiating the intricate complexities of how our specific businesses really work, and figuring out how to make them work better.

So when you announce that "IT as we know it is really over" and that from now on the hot topic is "business technology," you can understand why we'd be skeptical that you can improve our business operations in nontrivial ways.

Especially when your idea seems to be to truck in a few standardized setups and bundle some services, with the whole works focused on improving *your* business, not ours.

That sounds a *lot* like IT marketing as we've always known it.

Still, we're willing to be surprised. We'll listen. Tell us about this "business technology."

But if you want to convince us, tell us about something that's not just business as usual.

Not more products.

Not cookie-cutter consulting.

Not same old, same old services.

But something that's a lot more valuable than the usual suspects.

We'd love to hear that you can guarantee our businesses will run better. Or that you can solve the subtle process problems that have baffled us. Or that you can even just unwind the business-specific process tangles that give our users — and us — fits.

None of those seem likely, but show us what you've got.

Heck, we'd even be glad to hear that IT marketing as we know it is really over. But we'll believe that when we see it. ▪

**FRANK HAYES,** *Computerworld's* senior news columnist, has covered IT for more than 20 years. Contact him at **frank_hayes@computerworld.com**.

## Unclear on the Concept

This company uses BlackBerries for remote e-mail and also allows remote e-mail access via the Web, reports a pilot fish working there. User call to help desk: Does my new BlackBerry have Internet access? Help desk tech: Yes, it does. User: Then can you set up a bookmark for the Web-mail site on my BlackBerry? Sighs fish, "The tech asked if she was having problems receiving mail on the BlackBerry. After a pause, the user responded, 'Oh, I guess that was a dumb request' and hung up."

SHARK TANK

## Friendship

**Panicked manager at a small company calls his friend, the boss at an independent tech-support outfit just down the street. My PC won't boot, and I need a tech on-site immediately! he wails. How about troubleshooting it over the phone first? tech boss suggests, since an emergency support call will cost at least $300. But the manager insists, so his friend sends pilot fish. "I took one look at his screen, saw the 'invalid boot disk' error, ejected a floppy, pressed the space bar and watched Windows come to life," says fish. "Then I handed the guy my time sheet to sign. I wonder if he got hit with the full $325 bill, or if my boss gave him a special price."**

## Who Am I Again?

**Engineering manager calls pilot fish: Her underling is out of the office, and she needs a file on his PC. "He had given her his password, and she was logged on as him and found the file, but she couldn't open Outlook to e-mail it to herself," says fish. "I asked if she had a thumb drive she could plug into his PC to copy the file. She replied, 'I'm on my laptop logged in as him. He told me where the file would be, and there it was.' She had logged onto her laptop as him and gone into their shared network drive. She thought she needed to be logged on as him to open the file."**

## What IT Is For

**User calls pilot fish complaining that he can't connect his USB flash drive because he doesn't have administrator privileges, and can he please come take care of it for him. "I head down to his desk and mount the drive," says fish. "Then, per our company's guidelines, I open it up to scan it for malware. Holy cow! I think, looking at the names of the only three files on the drive. It takes a *lot* of gall to ask tech support to install your jump drive just so you can watch porno movies at work!"**

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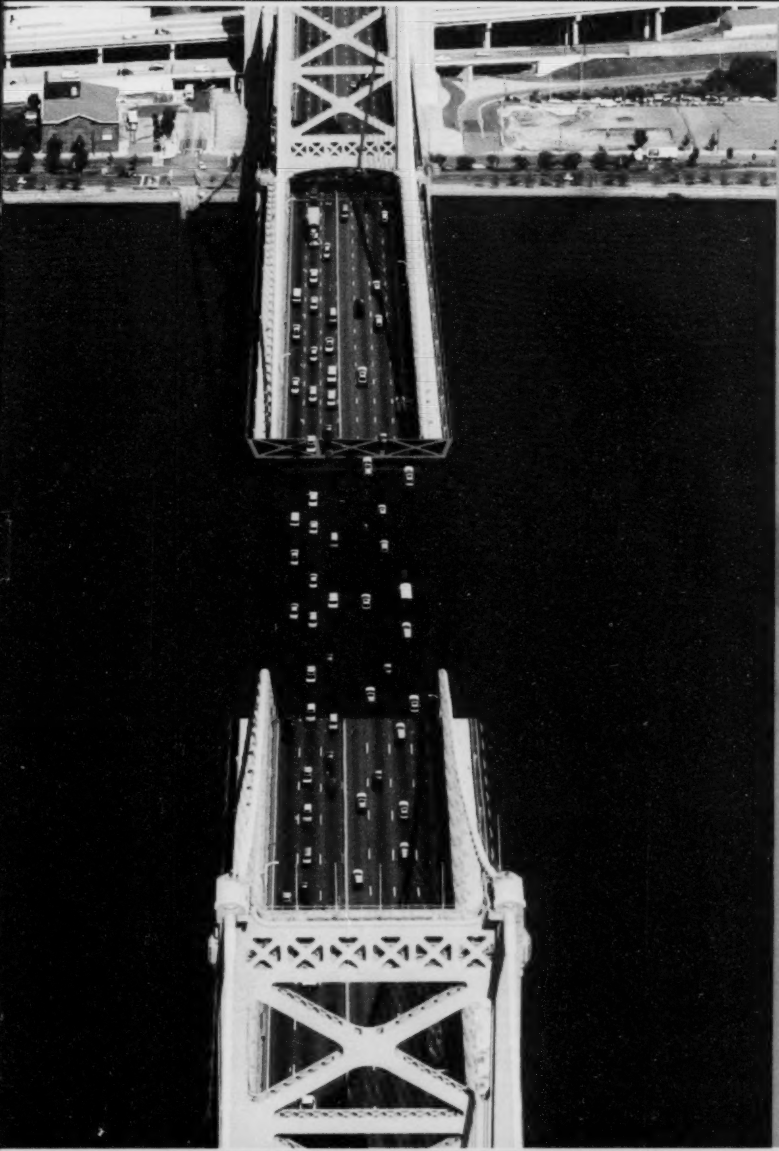
HOW TO EXPECT THE UNEXPECTED



Quick, take a snapshot. Suddenly part of your IT infrastructure is inaccessible. What happens to your business?

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Source: Gartner "Market Share: Application Integration, Middleware and Portal Software," Worldwide, 2005. Based on 2005 license revenue worldwide.

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